The Mining Journal,

RAILWAY AND COMMERCIAL GAZETTE:

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

No. 1380.—Vol. XXXII. LONDON, SATURDAY, FEBRUARY 1, 1862. {STAMPED.....SIXPENCE. UNSTAMPED..FIVEPENCE.

R. JAMES CROFTS, SHAREBROKER,
No. 1, FINCH LANE, CORNHILL. (Established 17 years.)
RES FOR SALE, net (by order):—5 Old Tolgus United, £5¼; 50 East Wheal £2⅜; 50 West Condurrow and 20 Wheal Hearle, at fair offers.
TED:—Great Caradon, 8s. 6d. to 9s. 6d. (business to the extent of 500 shares).
rs of mining shares DIFFICULT OF SALE in the OPEN MARKET may hear asers, and parties in ARREAR OF CALLS, or SUED BY MERCHANTS may eir true legal position by applying to Mr. CROFTS, accompanied by a remittance es of 10s. 6d., as a test of the *bona fide* nature of the enquiry.
24, 1862.

. JAMES LANE, No. 44, THREADNEEDLE STREET, LONDON, E.C.
E LANE has FOR SALE, at nett prices:—20 Arthur, 16s. 6d.; 10 Bottle Hill, 10s.; s; 20 Carn Camborne, 15s.; 20 Cuddra, £2¼; 100 Dale, 12s. 6d.; 10 East Carn 10⅝; 10 East Caradon, £30; 20 East Russell, £3; 50 Great Wheal Martha, 20s.; th Guriyn, 3s.; 2 Grambler and St. Aubyn, £17; 50 Great Retallack, 15s.; 50 reveddoe, £1; 10 Hingston Down, £2⅞; 5 Harriett, 22s. 6d.; 20 Kelly Bray, 0 Lady Berths, 12s. 6d.; 20 Ludcott, £2¾; 10 Moyle, £2¼; 20 Marke Valley, 20 North Downs, £5⅝; 25 North Minera, 16s. 6d.; 50 Prosper United, £2½; 2 nos; 50 Ribden, 4s.; 20 Redmoor, 5s.; 20 Rosewall Hill and Ransom; 50 Sor- 1ls. 6d.; 3 Seton; 3 Trelawny, £19½; 40 Wheal Edward, £2½; 10 Wheal £16; 20 West Silver Bank (£3 paid); and 10 Worthing, 12s. 6d.

TER WATSON, STOCK, SHARE, AND MINING OFFICES,
79, OLD BROAD STREET, LONDON, E.C.
raphic messages to buy or sell Railway, Mine, and other shares and stocks punc- ttended to on commission, or at nett prices for cash, or for fortnightly settlements, vice as to purchases or sales.
Seventeen years' experience (two in Cornwall and fifteen in London).
Bankers: Union Bank of London.
e are several dividend mines paying from 15 to 25 per cent. on current market ith increasing prospects; also, several progressive mines on the eve of a dividend- state, the shares in which will, no doubt, have a great advance in price.
scribers and clients will refer to my recommendations during the past four months, ozen mines, they will find that they have advanced considerably as predicted, om 75 to 400 per cent., whilst others, which I stated should be sold, have since n price.

R. LELEAN, 11, ROYAL EXCHANGE, LONDON, E.C., has FOR SALE the following MINING SHARES, free of commission:—

red Consols, 25s.	50 Great Martha, an offer	125 St. Day,
ynford Hall, 30s.	wanted.	10 S. Bryn Gwiog, £4¾.
tallack, £230.	105 Great So. Tolgus, £4½.	1 So. Wheal Frances.
yn Gwiog, £26¼.	150 Gt. No. Copper, £1⅛.	5 So. Carn Brea, 78s. 9d.
ilins.	10 Hingston Down, £3.	120 So. Condurrow, 13s. 6d.
sset, £110.	3 Horward United, £2½.	2 South Basset, £10.
arlotte Utd.,¦13s. 6d.	1 Herodsfoot, £39.	20 Trelyon Consols, £11.
ot's Kitchen, £29.	20 Kelly Bray, 11s.	12 Trelawny, £18½.
ddra, 30s.	20 Lady Bertha.	350 Tamar Consols.
lford Amal., £29.	5 Linares.	25 Trewcatha.
rn Brea.	5 Long Rake.	10 Tolvadden, £1⅝.
rtio, £2¼.	10 Ludcott.	50 Vale of Towy, 2s. 9d.
le, 12s. 9d.	10 Marke Valley, £10 1s 9d	W. R. Down, £12.
rake Walls, 22s. 6d.	2 Mary Ann.	5 West Stray Park, £3¾.
ng Dong, £10¼.	10 Margery, £6.	20 Wheal Unity, 11s. 6d.
st Russell, £2¼.	150 North Minera, 17s.	1 West Seton.
st Carn Brea, £103¾.	25 North Basset, £4¼.	5 West Basset.
st Grenville, 25s.	12 No. Treskerby, £21¼.	100 West Margaret, 1s.
st Caradon, £30.	20 North Downs, £5⅝.	80 Worthing, 16s.
st Basset, £54.	12 North Roskear, £37.	120 Wheal Grenville.
st Trefusis, 15s.	10 North Crofty.	50 West Polmear.
st Rosewarne, 20s.	22 New Frances, 6d.	2 West Caradon.
st Treskerby, £1¼.	10 Old Tolgus United, £5.	10 Wheal Gryllis, £14¾.
reat Wh. Vor, £5⅞.	5 Par Consols, £8¾.	5 West Bryn Gwiog.
t. Fortune, £12 18s 9d	10 Prosper United, 37s. 6d	75 West Condurrow, 30s.
reat Alfred, 8s. 6d.	10 Providence, £44¼.	1 Wheal Seton.
reat Moelwyn (£1 15s paid), offer wanted.	3 Rosewarne Utd., £16½.	200 Wheal Norris, £2 8s. 9d
	120 Rosewall Hill, £3⅜.	30 Wheal Arthur.
reat Crinnis, an offer wanted.	10 Stray Park, £32⅛.	10 Wheal Uny.
	1 South Caradon, £340.	1 Wheal Margaret.
reat Retallack, 13s.	45 South Darren, 25s.	25 Wheal Hearle, £12¾.

. LELEAN has SPECIAL BUSINESS in North Roskear, North Treskerby, East Brea, East Caradon, Wheal Basset, Wheal Butler, South Frances, West Basset, wall Hill and Ransom United, Trencrom, Kitty (Lelant), Wheal Hearle, East Basset, n Basset, Wheal Polmear, East Damsel, and Rosewarne Consols.
Bankers: Robarts, Lubbock, and Co.
vate and reliable information given, either by post or interview, for £1 1s., and ission on all orders 1¼ per cent. References, &c., required.
Royal Exchange, January 31, 1862.

EORGE RICE, SHAREBROKER,
No. 1, FINCH LANE, CORNHILL, LONDON.
Business done at close prices, for cash or account. Moderate commission.

OBERT OLDREY, STOCK, SHARE, AND MINING BROKER, 8, FINCH LANE, LONDON, E.C., begs to assure his numerous ts and the public generally that he will continue to exercise the strictest attention punctuality in executing any orders that may be entrusted to him.
BERT OLDREY has business in Devon Great Consols, West and Wheal Seton, South East Caradon, Marke Valley, and North Downs; also in New Seton, East Carn Brea, al Uny, North Treskerby, and West Rose Down.
Mines inspected by practical agents.
e usual Stock Exchange rates of commission charged on all mining, railway, and r shares, also on Foreign and Colonial Bonds.
Provincial brokers treated with on special terms.

R. R. H. M. JACKMAN, MINING AND SHAREBROKER,
2, ADAM'S COURT, OLD BROAD STREET, and BRITISH MINING EX- ANGE, SPREAD EAGLE COURT, FINCH LANE, CITY, E.C. SHARES FOR LE, free of commission, for cash:—

East Caradon, £30.	1 Wheal Basset, £110.	1 Seton, £126½.
North Roskear, £147⅜.	3 No. Treskerby, £24½.	100 Ribden (fully pd.), 5s 6d
North Robert, 19s. 6d.	100 East Budnick, 3s. 5d.	30 East Trefusis.

r. JACKMAN is a BUYER of—

Brookwood, 24s.	150 Ludcott, £2⅝.	10 Par Consols, £8¼.
Margaret.	10 Herodsfoot.	20 North Basset.
North Downs.	100 Tees Side, 2s.	150 North Crofty, 35s.

an. 31, 1862. Bankers: London and Westminster, Lothbury.

R. GEORGE BUDGE, SHAREBROKER, No. 4, ROYAL EXCHANGE BUILDINGS, LONDON, E.C. (Established 15 years), has FOR LE 4 Wheal Seton, £126¼; 5 North Treskerby, £24½; 3 South Frances, £114; West Caradon, £29⅜; 30 Tincroft; 50 East Carn Brea, £10 16s. 9d.; 50 North rns, £5 16s. 6d.; 100 Sigford Consols, 19s.; 1 North Roskear; 65 North Dolcoath; West Polmear, 5s.; 3 East Basset; 50 North Basset, £4½; 2 Basset, £101⅛; 5 lawny, £19; 100 Dale, 12s. 6d.; 30 Wheal Annie, 15s.; 70 East Devon Consols, ; 100 Tamar Sliver-Lead; 2 Stray Park; 50 Smith's Wood, £3⅞; 25 Great Wheal y, £5⅝; 100 Great Wheal Martha, 20s.; 100 Great Treveddoe, 14s.; 6 West Bryn ig, £5; 5 Brynford Hall, £6; 50 North Crofty; 100 East Seton, 5s.; 25 Crane; illins; 100 Great Caradon, 10s.; 7 Old Tolgus, £6; 100 North Minera, 16s. 9d.; 50 ly Bray, 12s. 3d.; 100 Ribden; 5 Bryn Gwiog, £29; 1 Devon Great Consols; 10 eal Gryllis, £15¾; 70 Wheal Hope, 9s. 9d.; 50 North Laxey, 9s. 9d.; and 100 at Retallack.
arties who would be induced to buy or sell shares by the recommendations contained circulars or advertisements would do well first to submit their offers to Mr. BUDGE.

AILWAYS AND MINES.
"THE MINING REVIEW,"
AND MESSRS. R. TREDINNICK AND CO.'S TRADE CIRCULAR,
OCK and SHAREBROKERS, and DEALERS IN BRITISH MINING SHARES, 78, LOMBARD STREET, E.C.
Capitalists who seek safe and profitable investments, free from risk, should act only n the soundest information. The market prices for the day are for the most part go- rned by the immediate supply and demand, and the operations of speculators, without re- ence to the *bona fide* merits of the property. Railways depend upon the traffic, expen- ure, and capital accounts, the probabilities of alliance or competition with neighbouring panies, the creation of new shares, the state of the money market as affecting the re- al of debentures, and other considerations founded on data to which those only can have ss who give special attention to the subject. Mines afford a wider range for profit than y other public securities. The best are free from debt, have large reserves, and pay di- dends bi-monthly varying from £15 to £25 per cent. per annum. Instances frequently ur of young mines rising in value 400 or 500 per cent. But this class of security, re than any other, should be purchased only upon the most reliable information. The designed devote special attention to railways and mines, afford every information to pitalists, and effect purchases and sales upon the best possible terms. Thirty years' perience in mining pursuits justifies us in offering our advice to the uninitiated in se- ting mines for investment; we will, therefore, forward, upon receipt of Post-office der for 5s., the names of six dividend and six progressive companies that will, in our inion, well repay capitalists for money employed.
MESSRS. TREDINNICK AND CO., 79, LOMBARD STREET, LONDON, E.C.

GEORGE MOORE,
1, CROWN COURT, THREADNEEDLE STREET.
In any business that GEORGE MOORE is favoured with, in which he is the buyer, he will give CASH ON RECEIPT OF TRANSFER.

JAMES HERRON has FOR SALE the following SHARES, at the prices quoted, and FREE OF COMMISSION:—

1 Bryn Gwiog, £28¼.	10 Hings. Down, £3 3s. 9d.	30 St. Day, 9s. 6d.
5 Billins.	5 Herward United, £7.	1 S. Bryn Gwiog, £5.
1 Basset, £104.	5 Herodsfoot, £39½.	1 S.Wh. Frances, £112½
5 Bedford Untd., £5 10s.	30 Kelly Bray.	10 So. Carn Brea, £3⅜.
25 Buller and Basset.	30 Lady Bertha, 12s. 9d.	20 So. Condurrow, 7s. 3d.
1 Brynford Hall.	30 Lady Eliza, 6s.	2 South Basset, £9 18s 6d
1 Cook's Kitchen, £29 10s.	10 Linares, £7 10s.	10 Trelawny, £19¼.
30 Cuddra, 29s. 9d.	2 Long Rake, £13¼.	20 Tamar Consols.
5 Clifford Amalgamated, £28½.	10 Ludcott, £2 13s. 6d.	10 Tincroft, £8 7s. 6d.
	30 Merilyn, 7s. 9d.	30 Tees Side, 3s. 6d.
2 Carn Brea, £75.	10 Marke Valley, £10.	20 Treweatha.
5 Caradon Cons., £10 2s 9d	1 Mary Ann, £15⅞.	20 Tolvadden, £1⅜.
30 Calstock Consols, 2s. 6d.	30 North Minera.	30 United Mexican, £9½.
30 Dale, 12s. 6d.	20 New Treleigh, 27s. 6d.	50 Vale of Towy, 2s. 9d.
20 Drake Walls, 19s. 9d.	5 No. Basset, £3 16s. 3d.	1 W. R. Down, £14⅜.
2 Ding Dong, £11 5s.	2 No. Treskerby, £24½.	10 West Stray Park, £3¾.
10 East Russell, £2 10s.	10 North Downs, £5 18s 9d.	30 Wheal Unity, 12s. 6d.
20 E. Carn Brea, £10 15s.	3 No. Roskear, £25⅛.	1 West Seton, £298¾.
30 East Grenville, 25s. 9d.	5 North Buller, £3.	5 West Basset, £13¼.
10 East Caradon, £29⅝.	10 North Crofty, 34s.	50 Worthing, 12s. 6d.
1 East Basset, £51 18s 9d	20 New Frances, 1s. 9d.	1 Wendron Con., £12½.
5 East Trefusis, 18s. 9d.	1 New Seton, £64.	20 Wh. Grenville, 31s.
20 East del Rey, £1 16s. 9d.	5 Old Tolgus United.	20 West Polmear, 4s. 9d.
20 Great Wheal Vor, £63¼.	10 Par Consols, £8⅜.	1 West Sharp Tor.
1 Gt. Fortune, £12 7s 6d.	10 Prosper United, 38s. 6d.	30 W. So. Caradon, 18s 6d
3 Grambler, £15 5s.	50 Port Phillip, 27s. 6d.	2 W. Caradon, £40¾.
20 Great Alfred, 6s. 9d.	2 Providence, £45.	5 Wheal Gryils, £14⅛.
50 Great Moelwyn (£1 15s. paid), 22s.	1 Rosewarne United.	50 West Wendron, 2s. 3d.
	10 Rosewall Hill, &c., £4.	1 Wheal Seton, £125.
20 Great Crinnis, 16s. 9d.	30 Ribden, 3s. 6d.	10 Wheal Arthur, 16s. 6d.
30 Great Martha, 19s. 9d.	10 St. John del Rey, £68.	5 Wheal Uny, £5 15s.
20 Guriyn, 2s. 9d.	2 Stray Park, £30¼.	1 Wh. Margaret, £45.
30 Great Retallack, 12s. 9d.	40 Sortridge Cons., 10s. 9d.	20 Wheal Moyle.
50 Great Onslow.	1 South Caradon, £325.	20 West Condurrow.
50 Great Northern Copper, 25s.	1 Silver Lake.	1 West Frances, £10.
	1 South Tolgus, £55.	5 Wh. Kitty (Lit.), £9¾
5 Gt. S. Tolgus, £4 5s.	30 So. Car. Hooper, 15s. 9d.	

And is a BUYER of 500 Worthing, 11s.; 5 North Roskear, £24½; 20 St. John del Rey, £65; 2 Providence, £44; 200 North Minera, 16s. 9d.; 10 Old Tolgus United, £6⅜; 50 Buller and Basset, 7s.; and 50 West South Caradon, 17s.
2, Adam's-court, Old Broad-street, Jan. 31, 1862.

MESSRS. VIVIAN AND REYNOLDS, 68, OLD BROAD STREET, LONDON, E.C., MINING ENGINEERS, INSPECTORS of MINES, COMMISSION, and GENERAL AGENTS for the PURCHASE or SALE of MINE SHARES, RAILWAY, and EVERY OTHER DESCRIPTION of STOCK.
Commission on share transactions, 1¼ per cent. on £100 and above, and 2½ per cent. or less sums.

MR. EDWARD COOKE, SHAREBROKER,
5, HERCULES PASSAGE, near the Stock Exchange, London, TRANSACTS BUSINESS for principals in RAILWAY, MINE, BANK, and INSURANCE SHARES, &c., at the usual Stock Exchange rate of commission, and from the contiguity of his office to that institution he is enabled to operate promptly on all orders entrusted to his charge, either by telegraph or post.
A Map of New South Caradon, together with reports from Capt. Johns, of West Caradon, and others, sent on application.
Jan. 31, 1862. Bankers: London and Westminster, Lothbury.

MR. GEORGE BATTERS, of No. 5, COWPER'S COURT, CORNHILL, DEALER in BRITISH MINING SHARES and OTHER SECURITIES, from long experience in all mining stocks, can advise as to investment of capital at closest market prices.
Mr. BATTERS has special business in East Caradon, South Caradon, Marke Valley, East Carn Brea, &c., and strongly recommends his clients to eschew mythical concerns, where the only mining is in the pockets of the unwary, and to buy such shares as above enumerated, that at all times are marketable, and out of which the vendor can only obtain a reasonable commission.
Since I called public attention, only three weeks ago, to East Carn Brea shares as likely to have a market rise of 100 per cent., the shares have risen 20 per cent., and the mine is improving beyond the expectations of its most sanguine friends. A great advance from the present price of 11*l.* may be looked for. Ore ground is discovered sufficient to return in profit all that the shares are now selling for, and the reserves are being increased at the rate of about 5000*l.* per month: 200 shares for sale at market price, or any number bought at a small marginal difference.

MR. BATTERS has SPECIAL BUSINESS in the SHARES of EAST CARADON, MARKE VALLEY, BILLINS, and EAST CARN BREA.

MR. F. LISABE, C.E. AND C.M.E., may be consulted by letter addressed to No. 38, GLOUCESTER CRESCENT, REGENT'S PARK, N.W.; or personally at his office, No. 25, MOORGATE STREET, CITY, upon all matters connected with mining.

MR. E. GOMPERS, MINING OFFICES,
3, CROWN CHAMBERS, THREADNEEDLE STREET, LONDON, E.C.
BUSINESS TRANSACTED in BRITISH and FOREIGN STOCKS and SHARES.
Terms, 1¼ per cent.—Bankers: London and Westminster Bank.

MR. THOMAS SPARGO, MINING ENGINEER,
STOCK AND SHAREBROKER,
224 and 225, GRESHAM HOUSE, OLD BROAD STREET, LONDON, E.C.
Commission, 2½ per cent.

MR. T. ROSEWARNE, 75, OLD BROAD STREET, LONDON, E.C., has FOR SALE:—

Bedford Consols, 1s. 6d. (call paid).	East Grenville, 30s.	Stray Park, £30.
	Great Retallack, 12s. 3d.	South Caradon, £327¼.
Bryn Gwiog.	Hingston, £3.	South Frances, £114.
Billins.	Lady Bertha, 12s. 6d.	Trelawny, £16¾.
Bedford United, £5 6s 3d.	Long Rake, £13¼.	West Seton, £297½.
Calstock Consols, 3s.	North Minera, 16s. 3d.	Wheal Seton, £126¼.
Clifford Amalgtd..£30½.	North Treskerby, £24¼.	Wheal Edward, £2⅛.
East Russell, £2⅝.	North Basset, £4.	Wheal Gryllis, £14⅜.
East Caradon, £30.	North Downs, £5⅞.	Wheal Arthur, 18s. 3d.
East Basset, £53¼.	North Roskear, £24⅜.	Wheal Uny, £5⅞.
E. Carn Brea, £10 16s 3d.	North Crofty, 38s. 6d.	Wheal Norris, 46s. 3d.
East Devon Consols, 40s.	Sortridge, 11s.	West Caradon, £44⅞.
	St. Day United, 9s. 6d.	

And is a BUYER of—

North Robert.	North Crofty.	Great Retallack.
North Downs.	East Carn Brea.	North Dolcoath.

T. ROSEWARNE, having just returned from his tour of inspection, will be happy to give his friends information respecting the leading mines in Devon and Cornwall.
January 31, 1862. Bankers: Bank of London.

MR. W. BIRDSEY, MINE SHAREBROKER, ST. MICHAEL'S HOUSE, CORNHILL (Established upwards of 30 years), is always in a position to TRANSACT BUSINESS in SHARES of DIVIDEND and PROGRESSIVE MINES at the closest market prices. Commission, 1¼ per cent.
W. BIRDSEY has business in the undermentioned shares:—

East Caradon.	Wheal Harriett.	East Basset.
South Frances.	Marke Valley.	Cook's Kitchen.
Holmbush.	Trelawny.	Providence Mines.
North Downs.	Holmbush (new issue).	South Carn Brea.
West South Caradon.	West Caradon.	Ding Dong.
Wheal Buller.	North Roskear.	West Wheal Frances.
Stray Park.	Mary Ann.	Tamar Consols.
	New Treleigh.	

WANTED, for cash:—25 Trelawny, 100 Treloweth, and 200 Tamar Consols.

MR. JAMES HUME, SHAREBROKER, 74, OLD BROAD STREET, LONDON, E.C.
The MINING SHARE MONITOR contains VALUABLE INFORMATION on EAST CARN BREA, UNY, GRENVILLE, SETON, ROSEWALL HILL, UNION, &c. Subscription, 5s. per annum, or 6d. per copy. All interested in mining property will find great benefit from subscribing to this circular. It is written entirely without bias, and only the very soundest mines are noticed. Commission, 1¼ per cent.

MR. JOSEPH GREGORY, MINING OFFICES, 2, GREAT ST. HELEN'S, BISHOPSGATE STREET, E.C.
Bankers: City Bank, Threadneedle-street.
Commission on purchase and sale of shares, 1¼ per cent.
OFFICE OF REFERENCE FOR THE BRYNAMBOR LEAD MINING COMPANY, CARDIGANSHIRE.

MESSRS. T. P. THOMAS AND SON, MINING AGENTS,
GENERAL SHAREDEALERS, AND AUCTIONEERS,
2, CROWN COURT, THREADNEEDLE STREET, LONDON, E.C.

MR. T. E. W. THOMAS, MINING AGENT AND GENERAL MINING SHAREDEALER, 16, HACKINS HEY, LIVERPOOL.
Mr. THOMAS has had placed in his hands FOR SALE a number of SHARES in the MOUNT PLEASANT LEAD MINE, near Mold, a mine likely to be much richer than at present, but which now pays in dividends a much larger percentage than any other mine in the list. Prices and particulars on application.

JOHN R. PIKE OFFERS the undermentioned SHARES at the prices quoted, FREE OF COMMISSION:—

2 Carn Brea, £74.	1 Condurrow, £60½.	15 East Russell, £2¼.
10 East Carn Brea, £103¾.	5 North Treskerby, £23¼	15 East Grenville, 25s. 6d.
10 Cwm Erfin.	20 North Basset, £2¾.	2 Herodsfoot, £39¼.
10 Great Fortune, £12⅜.	10 Wheal Gryllis.	4 Providence, £44.
10 Marke Valley, £10.	5 North Roskear, £25¾.	5 Stray Park, £30½.
100 Great North Work.	25 Carn Camborne, 14s.	2 Wheal Margaret.

Mr. PIKE will be happy to insert any shares in his list free, unless sales are effected, when a commission of 1¼ per cent. will be charged.
Parties desirous of securing any of the above shares, are requested to make immediate and positive offers.
3, Pinner's-court, Old Broad-street, London, E.C., Jan. 31, 1862.

JAMES B. BRENCHLEY, 78, OLD BROAD STREET, E.C., has ESPECIAL BUSINESS for cash, each nett, in—

5 Basset, £102.	40 Gt. So. Tolgus, £4 1s.3d	5 Wendron, £12.
4 Carn Brea, £72.	20 North Downs, £5½.	5 Kitty (Lelant), £10.
10 Clifford Amalg., £30½.	4 North Roskear, £23¾.	25 Ludcott, £2½.
2 Copper Hill, £105.	4 Providence, £43½.	3 Margaret, £43.
2 Condurrow, £58.	2 South Frances, £113¾.	10 Trelawny, £19.
10 Great Fortune, £12½.	5 Trelyon, £10.	5 Mary Ann, £15¾.
50 North Robert, 19s.	50 Treloweth, £1⅝.	100 Tamar, 33s. 6d.

Business transacted in other mining shares.
Bankers: London and Westminster, Lothbury.

NOTICE OF REMOVAL.
MR. FREDERICK WILLIAM MANSELL,
MINING SHAREBROKER.
On and after the 21st of December,
OFFICES at 75, OLD BROAD STREET, LONDON, E.C.

MR. JAMES HAMMON, STOCK AND SHAREDEALER,
1, CROWN COURT, THREADNEEDLE STREET, LONDON.

WILLIAM SEWARD, MINING BROKER, STOCK AND SHAREDEALER, 26, THROGMORTON STREET, LONDON, E.C.
Commission, 1¼ per cent. on £100 and above, and 2½ per cent. on less sums.

JOHN RISLEY, SHAREBROKER,
32, LOMBARD STREET, LONDON, E.C.

RICHARD CLIFT, MINE SHAREDEALER late of Redruth, now 48, THREADNEEDLE-STREET, LONDON, where al letters are to be addressed.

MESSRS. R. HORLEY AND CO., SWORN STOCK, SHARE, and MINING BROKERS, 45, CORNHILL, E.C. (late of 2, Royal Exchange-buildings), TRANSACT EVERY DESCRIPTION OF MINING BUSINESS, on commission only, and are in a position to obtain reliable information respecting all dividend and progressive mines.
N.B.—Messrs. HORLEY and Co. publish a weekly Mining List, with the closing prices every Wednesday, and will be most happy to forward the same (gratis) on application.

JOHN GLEDHILL AND CO., MINE AGENTS AND SHAREBROKERS, MINING OFFICES, CORN EXCHANGE, LEEDS.

MR. G. SHEPHERD, CIVIL, MINING, and AGRICULTURAL [illegible] Arbitrations, valuations, &c., conducted.—Address, by letter, 79, Cannon-street West, London, E.C.

MR. M. GILDROY STEWART, CONSULTING MINING ENGINEER,
COLLIERY VIEWER AND SURVEYOR,
INSPECTOR AND VALUER OF MINES AND MACHINERY,
BEDMINSTER, BRISTOL.

MESSRS. THOMAS PENROSE and THOMAS PRICE UNDERTAKE ASSAYS and ANALYSES of EVERY DESCRIPTION of MINERAL PRODUCT, FUEL, and MANURES, at Messrs. Richardson and Co.'s Assay Office and Laboratory, Copper Ore Wharves, Swansea.

GREAT TREGUNE MINE.—FOR SALE, TWO HUNDRED SHARES in this MINE, at 3s. 6d. per share.—Address, "Z.," Post-office, Cornhill, London.

TO AUSTRALIAN MINING COMPANIES.—A MINING ENGINEER and METALLURGIST, who proposes visiting Australia, will UNDERTAKE to INVESTIGATE the POSITION and PROSPECTS of MINING COMPANIES in that COLONY.—Communications to be addressed to "X. Y.," Mr. Limbird's, 344, Strand.

TO MINE AGENTS.—WANTED, as UNDER AGENT in a large MINE in PORTUGAL, a smart young man, about 30 to 35 years of age. He must write well, and be competent to make out plain accounts. Applicants to explain the nature of the duties they have been attending to during the last three years.—Apply by letter only, to F. T. BARRY, 1, Adelaide-place, London-bridge, E.C.

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Original Correspondence.

THE HARTLEY NEW PIT CATASTROPHE.

THE COST OF SINKING SHAFTS, ETC., WITH REMARKS UPON THE ADVANTAGES AND DISADVANTAGES OF WORKING A COLLIERY UPON THE PRINCIPLE OF HAVING ONLY ONE SHAFT.

SIR,—In order that we may thoroughly consider this important subject, and arrive at a satisfactory conclusion, it is necessary to take into consideration a variety of circumstances under which shafts are sunk, and we will assume the depth of all shafts to be 200 yards. I am by no means fixing this as the maximum, but, considering all circumstances, it is a depth that may be considered more than a medium one, for in many of the cases where shafts are sunk to much greater depths, coals have been found and worked at not half the depth assumed: in such cases it frequently happens that the shafts are numerous, and only require to be widened out, if not adapted to the requirements of the times. It may be necessary to observe that the cost of sinking shafts, of whatever form or dimensions, depends upon the hardness of the strata to be pierced, the angle of its inclination, the quantity of water to contend with, and whether quicksands of a formidable character have to be encountered. Where shafts are made to serve the double purpose of upcast and downcast, by partitioning or bratticing them, it is frequently the case that they are square, or nearly so, in form, whilst others are circular, and some few oval. In some of the circular shafts it is customary to sink them wide enough to form two shafts when bricked. This operation is performed by making two cylinders, each of equal area. Against this system the same objections will not apply as against those where the division is made of timber; yet it is a system that I should be very sorry to recommend under any circumstances, whilst the cost of sinking under such circumstances will be found to exceed that of sinking two shafts.

The cost of sinking a square shaft, and dividing it so as to form two, or the cost of dividing either circular or oval shafts with bratticing, is a subject upon which I cannot speak from any positive knowledge that I possess of such operations, inasmuch as I have never had any experience of that nature: however, I do not regret being unable to speak with greater accuracy upon this part of the subject. The cost of sinking two circular shafts, each 11 feet diameter, inside brickwork, and walling them with 9-in. brickwork and hydraulic lime, through strata of an ordinary character, with the angle of inclination not exceeding 20°, nor the water 1000 gallons per hour, in a locality where coals are moderately cheap, ought not to exceed 7*l.* 10s. per lineal yard, everything included. I have superintended the sinking of shafts that have not cost more than 6*l.* 10s. per yard, after allowing for wear and tear, and taking into consideration the cost of everything used in such undertakings; but I am not desirous of spinning anything too fine, in order to strengthen my position, or make the system under consideration to appear blacker than it really is. I am quite aware that under some circumstances sinking becomes more expensive than under the circumstances cited, especially when much water is met with in sinking, but this can only apply to the first shaft, inasmuch as the second would be drained by the first sinking; therefore, whether two shafts are sunk or not, the cost must be borne of pumping the water and fighting the difficulties that are inseparable from sinking under such circumstances. The cost of sinking shafts is also greatly enhanced where iron tubbing is used for the purpose of keeping back the water, but it should be borne in mind that an object is thereby sought to be attained which should meet the extra outlay—namely, that of dispensing with the pumping of water. In some instances where the stratum is very strong, and its angle of inclination 30° or upwards, the cost of sinking may reach 12*l.* per yard, but these are exceptional cases. The cost, therefore, of making provision against such contingencies as arise from working a colliery with only one shaft is clearly that occasioned by sinking the second shaft, when most of the difficulties connected with sinking have been removed by sinking the first shaft; therefore, if we take 7*l.* 10s. per lineal yard as the cost, we shall have the sum of 1500*l.* for sinking a shaft 200 yards deep, a sum ample in the majority of cases. If we take 12*l.* per yard we have a sum of 2400*l.* for sinking a like distance, but this, be it remembered, only applies under the conditions previously named.

Those who remember my remarks upon the sinking of shafts in the papers contributed by me to the Journal, will probably remember that I dispense with the usual custom of putting in curbs or rings, excepting about two in a shaft of the depth assumed. Nor do I recognise useless expenditure, whether for the purpose of pleasing the eye or satisfying the mind of some ambitious viewer. The next question that we will consider is whether this sum is equal to the disadvantages and risk of working a colliery with only one shaft. It may be thought that those who find and wear the money are the best judges upon these questions; however, if this notion be entertained by anyone, I need only refer him to the case which has called forth these remarks, and his mind will soon be disabused of such notions. The disadvantages of the system under consideration are both numerous and highly objectionable: a colliery with only one shaft is placed in the same relation to a colliery with two as a man with only one arm is to another with the use of both, so far as the raising of coal to the bank goes. Granting that the machinery is adapted for raising a load up one shaft whilst the empties are descending the other, little more than half the quantity of coal could be raised in the same time as in two shafts, each having two separate ropes, the one descending whilst the other is ascending. A further and powerful objection applies to the principle of having only one rope in each division of the shaft—that of the load in its descent checking the current of air in the upcast, and *vice versa* for the downcast. I have perceived the current of air to be momentarily suspended on different occasions when this system has been employed at a distance of more than 1000 yards to the shaft. Two disastrous explosions at one colliery, launching nearly 200 human beings into eternity, and occurring within 11 months of each other, are clearly traceable to this cause. The same objection does not apply to one shaft, whether used for upcast or downcast, providing one rope is ascending whilst the other is descending.

The next objection I shall notice is that of having to suspend all operations during the time any repairs are being made to the pumps, or the changing of buckets, clacks, &c. This is an objection that must be very annoying when a brisk trade demands that every moment during working hours shall be devoted to raising coals to bank. With this objection may be coupled that of the liability of any of the machinery connected with the winding of coal to break or become deranged, or even the guide-rods: in such cases the whole of the operations are not only suspended, but the men are imprisoned in the mine until such repairs are made, or have to be drawn out of the mine by some slow and tedious process. Another objection is the wear and tear of the bratticing, and cost of keeping the same in repair; and to this may be added the objection that applies when it becomes necessary to sink a shaft deeper: in case of having only one shaft, operations must be suspended in both shafts whilst the sinking is proceeded with. If there are two or more shafts, with separate engines, then the sinking of a shaft deeper may be conducted without suspending operations. So far the objections are of a pecuniary character. I will now endeavour to show that both justice and humanity imperatively demand that this rude and barbarous system be at once abandoned, and the generosity of a sympathising public ought not to be taxed to the probable expent of 20,000*l.*, besides entailing a permanent tax upon that unfortunate locality which at the present time is the scene of such devastation; to say nothing of the grief and anxiety that has been entailed upon a great nation for such a length of time. Royalty itself has not been exempt, as is shown by Her Gracious Majesty's touching and sympathising words—"My heart bleeds for the poor people." Although no human power can now assist the unfortunate beings who so short a time ago contributed in no small degree to the maintenance of their country's greatness, and the individual comfort and happiness of those near and dear to them, we can at least enquire what is the primary cause of all this misery, destitution, and sorrow, and whether it was preventable or not; and in so doing we cannot fail to see that the sinking of a staple, at the probable cost of 100*l.*, would have prevented the catastrophe, and have spared the feelings of so many. I ask what considerations ought to spare those guilty of such an enormity? Certainly not that of sympathy for the victims to so unfortunate a system. Although at this moment tears start involuntarily into my eyes, and roll down my cheeks in profusion, I feel that justice demands that we should not allow such considerations to influence us in using our efforts to guard against the recurrence of such a catastrophe. Do not understand me to say that the parties either guilty of oversight or false economy ought to be criminally charged, for I believe they do, and will, suffer greater torture of mind, until they are released by the hand of death, than any that could be inflicted by human lawgivers. This case, although more appalling in its character both for the number of its victims and the manner of their death, does not more strikingly illustrate the necessity for sinking duplicate shafts than do others that have appeared before the public during the past year. Supposing an explosion to occur in the workings of a bratticed shaft; if the violent enemy fire-damp should not have completed its work of destruction, it remains only for the after-damp to perform the same deadly mission. If the bratticing takes fire, as at Hamilton, death awaits the poor miner with the same degree of certainty. If, as in the present case, a new and unlooked-for occurrence presents itself, blocking up the shaft, death still awaits the poor miner, aggravated by the pangs of hunger and the consciousness of the doom that awaits him. If we consider the subject in so far as affects the ventilation of mines, we shall be enabled to see that the system is at fault. In a bratticed shaft the area of the respective divisions must be less than where two separate shafts are employed: in the present instance the shaft before bratticing appears to have been only 12 ft. diameter, a full third of which space may be deducted for room occupied by pumps, bratticing, &c. With these facts before him, let the reader fancy from 200 to 300 men working in a mine where the ventilation is conducted on such principles, and he will be enabled to realise something of the evils of the system under consideration. I find that space will not permit me to dwell longer upon the subject, and shall, therefore, pass over the minor objections for the present, and offer a few general remarks upon the system; first remarking, that if my statements are correct, and reasoning logical (which I challenge anyone to prove to the contrary), the wonder is that this system has been so extensively practised for such a length of time, and that it requires such a catastrophe as the one before us to arouse the minds of men who are entrusted with the lives of so many of their fellow-creatures to a sense of their duties, and to enable them to see clearly their true position

It has been vauntingly remarked on different occasions that the North of England is much in advance of the rest of the mining world. Who could give credence to the statement, were it not supported by evidence that the North is the parent of the system under consideration, and that many of the most disastrous catastrophes that this country has ever witnessed have been brought about under the supervision or management of viewers from the North? Would this country not have rang with indignation if the captain of a vessel, or the directors of a railway, had caused such a sacrifice of life through such a mistaken notion of exercising economy? And are not the poor miners entitled to the same consideration as other subjects of the realm? Why should not the same laws be in force for protecting the miner as for the mariner and the railway traveller? Does not the law require that every vessel, prior to being chartered, should be deemed seaworthy by a competent judge, and that before a single passenger can be conveyed on a railway no niggardly economy in the construction of the line shall be allowed to interfere with the safety of its passengers? Who that wishes to advance the interests of practical mining, and lessen the frightful loss of life that annually occurs, would offer objection to the same power being extended to newly-opened collieries, and that it should be rendered imperative in all cases to have duplicate shafts, and that sufficient time be allowed for those who are working with only one shaft to sink additional ones, so that the Inspectors should have power to suspend operations until such conditions were complied with? I shall be most happy to see measures taken during the ensuing session of Parliament to accomplish so desirable an object. If any of your numerous correspondents should be in favour of the system I have denounced, and consider that my remarks are too severe, I should feel obliged by their stating wherein I have exaggerated or overdrawn the evils of the system complained of.

Jan. 27. —— JOSEPH GOODWIN.

THE SACRIFICE OF LIFE AT HARTLEY NEW PIT.

SIR,—Since writing you last week on the course I should have pursued for saving the lives of the men entombed in the Hartley Pit, I have hourly watched the reports from it, and the more I read the more I am convinced of the course pursued being wrong. My stern opposition to mines being worked with one shaft only has for many years been well known—a system which, I maintain, ought not to be allowed. Passing it for the present, I will endeavour to explain my views as clearly as possible on the main points connected with this deplorable accident. Many letters appeared in your last on the subject by parties not conversant with steam-engines erected for such purposes, some of whom suggest wrought-iron beams: others, that a portion only should be of wrought-iron, applied, too, in the least effective place. To those offering such suggestions I have but one reply—they are not required. The engine at the Hartley Pit is in principle nothing more than the common Cornish pumping-engine, of which thousands, I may say, have been erected in the West of England, where no one ever heard of half the main beam falling into the shaft. My old friend, Mr. Hopkins, has lauded the Northerns beyond measure for their genius, good management, and skill displayed in erecting and perfecting machinery, which is beyond comparison superior to that of the West. Be that as it may, he cannot point out a single instance of men having been sacrificed by hundreds, or that they ever allowed the main beam of an engine to fall into the shaft, which, with ordinary precaution, appears to me an impossibility. Here is a main beam, with its centre bearing in on the wall, the nose over the shaft, to which a strong main rod is attached, and carried down the shaft for connecting the pump-rods to, without the least provision being made to prevent its falling headlong down the pit in case of accident—I say, sane men would not have permitted it to have been so. Why were there not catches on the main rod, and bearers across the shaft, a few feet below the nose of the beam, that would have resisted a weight of at least 200 tons. Such should have been, and with the catches sufficiently strong, the main beam might have been held in its position, without ever being allowed to fall more than a couple of inches below its ordinary working position—I unhesitatingly say that, with proper precautions, the beam could not possibly have fallen 6″ below its working level. The main beam of the last engine I had erected broke a few months since, but it did not fall into the shaft, neither was there a single man hurt. The breaking of main beams is not an unfrequent occurrence, but West countrymen are not so unguarded as to leave the most remote chance for such falling into the shaft, and destroying two or three hundred valuable lives. Further, the section of the shaft appropriated to the pumping-machinery should have been well and securely covered, except such portion of it as would admit of raising and lowering the pumps and gear connected with it. I observe that the engineman ran to stop the engine on the accident taking place. Surely, he did not imagine the remaining portion of the beam would fall into the shaft also! I contend that it was entirely through negligence, and want of proper precautions, that the beam was ever allowed to fall into the shaft. If catches were provided, I ask, where were they placed? and what has become of them?

I may next be permitted to ask, of what size were the pumps? what length were they? and the number of divisions they were in? as I contend the nose end of the beam should not have come down on the catches with a force greater than 20 tons, even if they had plunger-lifts in the shaft; and if drawing-lifts, not near so much. I would also ask, how many catches were there on the rods in the shaft below the surface?

The next point to which I shall refer is—What broke the beam? The engineman says he perceived nothing to indicate any catch or hitch on the engine—be it so. I believe the engine to have been working dead, or what is more commonly termed dragging, for days, perhaps, weeks previous, entirely through the bottom water and air supply holes being allowed to become choked—what miners term the fork not being kept clear. When such happens with a good bucket in, or a tight pole, what is the result? Who can tell the weight thrown on the engine by the pumps and their stays? Coal being a light substance is constantly washing in—even horse-litter may have been carried back and assisted in choking up such supply holes. Practical men, accustomed to pumps, are aware that when an engine is straitened for water and air-way, the whole lift is seen to rise and rebound, whilst the valves often sound equal to the report of a gun, which shows that from such causes as I have named a most undue strain may be, and I believe has been, placed on the engine.

I have myself been engaged with others sinking a shaft, where we kept the lift of pumps down with us, the holes in the bottom of which I was often obliged to plug up, and wrap my coat around (to starve the lift, as we call it), for the purpose of making the engine lift the pumps that they might drop into the pit that had been prepared for them. Feeling perfectly satisfied the only injury we could do was parting the rods—the main beam, even though it should break, we knew could not fall upon us in the shaft, as it had been secured from so doing, otherwise we should not have had recourse to such means. It has been reported that the underside of the beam was unsound, or what it frequently termed honeycombed. If such were the case, it would be of little consequence in comparison with a defectiveness on the upper side, where the strain is altogether tensional, whilst the lower part has to resist compression only; and, as cast-iron will resist a crushing strain from six to seven times greater than it will that of tension, the breaking of the beam cannot be attributed to the defectiveness of the under side. I have not the least doubt as to the cause of the beam breaking, but I say—why was it allowed to fall into the shaft? I will next ask if the lifts lost their water? Were the rods drawn out of the pumps? And if they were large enough to admit a boy being sent down them? From statements in the papers the clack-door was in sight of the men below. Surely it was an oversight of them not to have taken it off, by which they would at once have got a supply of fresh air, meat and drink could have been passed down to them, and in moderate size pumps the men might have been drawn up; and if not large enough for them, the boys at any rate might have been. It is asserted that fine rubbish and water fell, and choked the air-holes, which, on being cleared, emitted smoke. It was the closing of these holes that caused the death of the men, whom the deficiency of air had all but exhausted before; and had penthouses been put up in the shaft, as suggested by me last week, with floors to throw the stuff on as they sank, such fine material would not have fallen to the bottom, and closed up the only passages for air that remained, and in all probability the men would have been alive to this moment.

I also notice that when a fall of rubbish higher up took place in the shaft so much foul air came up as to drive the men from their work. Surely North countrymen must be very deficient in knowledge, as had they tied a few blankets, or even bundles of straw, loosely together, and by repeated operations of hauling up and dropping them again in the shaft, it could have been kept free of foul air as fast as it came, and the men, with penthouses over them, could have continued at their work. Such primitive measures are effectual, though they may not be taught in Government Schools, from which Inspectors are selected; therefore, it is hardly to be expected they can have recourse to them. Such experience is more generally confined to practical men.

Whatever may be the decision of the jury, I contend (in fact, there cannot be a doubt) that gross negligence has taken place with some one, be it who it may. In conclusion, I would ask if all the engines in the North are so contrived that when the breaking of a beam takes place it is bound to fall into the shaft? Or has this awful calamity so awakened the Government Inspectors to a sense of their duties, that they are now hastening from pit to pit, urging on the proprietary the necessity for adopting sufficiently strong catches, or covering of shafts, to guard against such wholesale slaughter in future?

I shall not say a word on the sufferings of these poor creatures, or the feelings and want of the hundreds who have been left to mourn their loss, on which the country at large will be painfully expressive. —*Jan.* 28. —— NICHOLAS ENNOR.

THE HARTLEY NEW PIT ACCIDENT.

SIR,—The Hartley calamity, details of which have long ere this spread through the length and breadth of the land, leaving a sad memento of misery and pauperism as a legacy to that locality, might, in our opinion, have been avoided if the pumps had been made of bituminised paper pipe (similar to those which have been lately so extensively supplied in this district for water and gas purposes), instead of iron. Our reasons for this suggestion are as follows:—

Had the pumps been of bituminised paper instead of iron, the "saw and axe" of the "deputy" found at the entrance of the Yard seam would have been able to do some good execution, as he might have sawed a portion of the pump away, thereby causing a current of air to ascend to the men face, and keeping that part of the mine where the men took refuge free from that deadly carbonic acid gas, or choke-damp. In addition to this, the parties in charge of the surface could have communicated with the miners by putting on the "crab-rope" (which has already done service in bringing the bodies of the men from the mine) to the spears, or pump-rods, and drawing them out, thereby making the pumps, which we are informed are 20 inches in diameter, available as a means of ventilation, and perhaps of rescue. A man might have been lowered down by the gin, or crab-rope, who being prepared with a carpenter's brace and bit and a small sweep saw could have cut a hole any size opposite to where the "jowling" was heard, and so have communicated with the unhappy sufferers; but the pumps now at Hartley being of 1¼ in. cast-iron, of course the process above spoken of could not have been applied, as there would not be space to work the tools generally used for boring iron, &c. We trust these suggestions may lead to future good. J. H. AND J. H. LITTLE, *Newcastle-on-Tyne, Jan.* 30. —— Engineers.

THE NEW HARTLEY COLLIERY ACCIDENT.

SIR,—All persons must deeply sympathise, not only with the poor unfortunate sufferers in this lamentable accident, but also with the owners, the Messrs. Carr. It is to be hoped, however, that this sad affair will lead to the adoption of two shafts, instead of the one-shaft system now in use. If a vein of coal is not worth the sinking of two shafts, it is not worth working. For the information of the North colliery owners, I beg to state that throughout the whole of the Shropshire collieries two shafts are used. The depth of these mines vary from 50 to 300 yards; yet on all occasions two shafts are sunk, let the works be deep or shallow. The deep shafts are about 9 feet diameter, well cased with bricks, set either in cement or hydraulic lime; and although some of the rocks which lay above these mines contain vast bodies of water, the brick casing is so perfect that no water penetrates the shafts, while the cost of keeping each in repair does not exceed 10*l.* per annum on an average; while, if slides were introduced, the cost would be infinitely less. The plan there adopted of getting the coal admits of the most perfect system of ventilation known. We never hear of between 100 and 200 poor colliers being destroyed by explosion, although the use of the safety-lamp is almost unknown in these mines. If an explosion should occur, it is of the most limited character, and the sufferers can be at once rescued, as all the air-courses remain intact. I have examined many collieries, and I know no single instance where the coals are wrought at a cheaper rate than in Shropshire collieries, or where the colliers work in greater security and comfort.

It has always been supposed by the Northern coalowners that by sinking one shaft they save money—this is a false notion. In the first instance, they commence, perhaps, a 12-feet shaft, which area they again divide into two or three shafts by means of brattices; this is an expensive operation in order to make it air-tight. The cost of labour and materials would more than pay for sinking an additional shaft in the first instance. Then, when the shaft is sunk the brattices are continually getting out of repair; this always endangers the ventilation of the mine—in fact, it is impossible to keep them in perfect repair. I see by the statement from your able correspondent, "A Voice from the Mines," that the keeping some of these brattices in repair costs 1500*l.* a year. Compare this with the cost of keeping a good brick shaft in repair; the former is a source of continual anxiety, the latter never gives the least trouble. Some of the brick-cased shafts in Shropshire were sunk sixty or seventy years ago, and are now as good as when first sunk; while had they been cased with timber they would have collapsed long ago. Again, during the most severe explosion in the mines these shafts suffer no injury, and the air-courses all remain open. But with only one shaft, and the brattice system, should an explosion occur the *brattices are the first to give way, and then the air-course is destroyed, ventilation ceases, and those of the poor sufferers who escape the ravages of the fire fall victims to the carbonic acid gas generated during the explosion;* and as the means of ventilating the mines ceases, *the dead are left for days on some occasions before the brattices can be repaired to explore the mines*, an operation which at times costs thousands of pounds, or perhaps twice the cost of sinking an additional shaft for air and safety to the workmen. The brattice system is another source of annoyance—viz., at times when the coalowners have large orders on hand the brattices get out of repair, and consequently the men cannot work, because the ventilation is bad. Days are thus consumed in effecting the brattice repairs.

I think I have said quite enough to show the advantage of having two shafts to each colliery in lieu of one; and the great advantage the northern coalowners would derive from the change I now submit for their consideration. From a long experience in colliery works and mining operations, I strongly recommend them to adopt the two-shaft system; they will find it more economical, safe and comfortable for their workmen.

Throgmorton-street, E.C. —— GEORGE SHEPHERD, M.E.

THE HARTLEY NEW PIT ACCIDENT—MINERS' SAFETY.

SIR,—The miners of England have a right to be thankful that such an interest has been manifested during the last few days on their behalf. Surely the good townspeople of Newcastle are entitled to all credit for their noble exertions. The Bishop and Earl of Durham, and other gentlemen and viewers, deserve the warmest thanks of the miners of this country for their efforts in endeavouring to improve the condition of the miners' daily employment. It is noble to hear the Earl of Durham stating that no amount of expense should be spared to improve the safety of the miner, for it must be remembered that his lordship is the greatest employer of labour in the North of England. I hope that Lord Durham will make his voice heard in the House of Lords on this all-important subject. It is high time that something was done for us. This is the time for the miners' interest to be looked into. The accidents which are continually occurring are almost enough to drive us from the pit to anything, rather than continue longer within the bounds of such a life-destroyer. Then, Mr. Editor, lend us your aid; let us have the assistance of the Journal in this serious matter. No doubt petitions will be presented to our Government soon, yet the press can do much to forward the cause of the miner. It can expose evils, and show the means of lessening them, a great deal better than it is possible for miners to do themselves.

The excellent petition read by the miners in Newcastle, on Saturday (or by Mr. Mather, for them), requires the addition of two or three important objects, which are at once to be sought after. I will enclose the petition for you, to improve upon in such a manner as you think best. There are several serious matters which afflict the collier, such as, for instance, going down upcast shafts to their work. Now, if anything happened to the cage, or slides, in which might be eight or ten men, the fearful consequence would be that the whole of those valuable lives would be sacrificed. How dreadful to think of, yet we do it daily, and where is the remedy? Our Government must supply it. We look to it, then let it do its duty to us. Another source of great danger is the mixed system of candles and safety-lamps. If a pit requires in some parts safety-lamps, then let it be safety-lamps throughout. This mixed system has cost the lives of hundreds of our fellow-creatures. Our leading viewers are of this opinion; then why, in the name of humanity, do they persist in such a fearful course? The pride of some will not let them apply the general adoption of safety-lamps. Oh! do not allow pride to cause misery to the homes of our wives and children. It pains me to see the severity with which Mr. Dunn has been used by some of our pitmen. I think we should let the years which have passed over his head protect him. It is well known that he has written several books for the improvement of mining science. It is not with individuals we have to complain—it is with systems. We do not rely with much confidence on the Inspectors. We leave our matters in the hands of the viewer of the colliery. No doubt the system of inspection has done good, yet it is the men who are with us daily, who come into our working places, that we have to rely on. The system of underground boilers is dangerous. Then let our petition include three or four important clauses; this will set our viewers right as regards their employers, and from the time that those new clauses shall come into operation then will we reckon our days of greater safety as having begun. Now,

I am trying to do my duty by bringing this before you, the public, our rulers; then, Sir, do agitate this serious matter to the bottom, let our homes once more rejoice in additonal safety being held out to and rendered compulsory on all colliery owners, and then we will, one all, praise our Government and countrymen who have helped us.

Jan. 29. A MINER.

THE HARTLEY NEW PIT ACCIDENT.

SIR,—The frightful accident at the Hartley New Pit has, no doubt, properly caused bratticed shafts to be generally condemned; but I not agree with the opinion which some who have touched upon the subexpress—that the invariable use of two shafts is the only remedy that be provided. I cannot deny that two shafts give additional safety, as all know what would be the consequence were we in the upper rooms house without windows, when the lower part was in flames; yet I do think that had my system of ventilation been in use at Hartley New every person in it would have been got out alive. A 24-inch main in shaft would have secured an ample quantity of air for the entire pit; had such a main existed there the means of escape would have been asy as with a second shaft.

our correspondents are aware that I have always proposed to have ught-iron pipes for ventilating upon my principle; and they will readily erstand that even in the event of such a breakage as that at New ley these pipes would not be at all likely to become entirely closed, hat the ventilation could have been re-established in a very short time. sole objection which has been urged against mechanical ventilation ch is at all tenable is, that where the furnace is employed the ventilacontinues for some time after the ventilating power is deranged; but t was the effect of the furnace at New Hartley? The moment the upper t of the furnace-drift was choked the ventilation was as completely ped as would have been possible with the worst of mechanical contrices. But this is not all; the products of combustion from the enorus fire burning in that furnace impregnated the whole of the Yard seam, the top of the staple to the very shaft, with the most deadly of gases; in addition to this, the furnace consumed the greater proportion of the air which was shut into the pit when the beam fell.

ad my system of ventilation been in use no brattice in the shaft would been required, and it would have been very easy for a man to be let n the pipe to bore through below the obstacle, and thus reach the men. my opinion that the greater number of the men died soon after the acci, and that those who have been found near the shaft in the Yard seam, at the top of the furnace drift, are those who kept back in the work, and, perhaps, even in the Low Main seam, until the foul gas arising n the sudden *extinguishing* of a furiously-burning furnace, had so spread f throughout the workings, as to become less poisonous than it had shortly after the accident.

s I presume you have been overwhelmed with correspondence on this ect, I will not trouble you further at present, but trust that my remarks receive consideration, at least, from those who regard furnace ventin as infallible.—*Atlas Works, Jan.* 29. R. HUGH HUGHES.

THE NEW HARTLEY COLLIERY ACCIDENT.

R,—In your very interesting Journal of last week, we find another sad tale, which, is too true, of the awful sacrifice of lives in coal mining. More than 200—fathers, husbands, and brothers—hurried from existence by such an untimely and unlooked-eath, which has again thrown our nation into bitter weeping and mourning for e who in the morning were the pride and support of their homes, in the evening forever; but, since so many have already commenced filling your columns, and promised to do more, I fear it is almost needless my preparing any lengthy comication when those nearer at hand will give the full details of the sad catastrophe. cient for me to state, as a practical miner, my opinion of the working of the diffe coal mines in this and other countries. It is just like a man building a new house, after all is completed, he finds that there are no chimneys to take away the smoke, must forever be subject to a continual smoke, sulphur, and foul air; just so with king in the coal mines—they sink one pit, and, because they have placed a division artition in the centre of the shaft (as they say), to drive down fresh air and bring foul air away, I ask anyone practically engaged, do they suppose, after a mine has sunk from surface to a depth of 100, 200, or 500 fathoms, and levels or drifts exed for the same-mentioned distance, that the one pit can give a sufficient quantity od air among so many hard-working men and horses to enable them to look as thy miners do with us? I allude to Cornwall, or Devonshire, or even here in our sh lead mining, where we do not confine our men or mines to one shaft; two, or even if required—expensive as they may be, they in turn pay for themselves. And here uld also add, even without damp or foul air, is it right that these poor men should be exposed to the dangers of the coal-drawing pit? What would those men have d for the machinery's damages, had there been another shaft or pit that they might e escaped, and once more been alive and happy? Gladly would they have assisted r partners in any amount of labour to get the machinery all right again, which is the work of a few days; but, no, they are gone, and unless we can arouse the ation of the Legislature to the evils of allowing any coal mines to be worked, or new opened, without an Act of Parliament that two or more pits should be sunk in and every mine (I mean coal mine), we may expect the number of deaths, widows, and ans to be constantly increasing. As to the bob's breaking, no man can lay aught to ne's charge for that, as the size and weight of the engine is, I should say, quite ble of performing her duties. Again, had there been another pit on the mine, another ller engine might have been erected, this breakage probably avoided, and cerly not a life lost. It is the wish of the people of this county (where coal mining is carried on to rather a frightfully dangerous extent) that Government will look into matter, and that Government Inspectors may have this to do. There should be a way or drawing-shaft, so that the men, in case of unforeseen accidents, may escape fate of those poor men at the Hartley New Pit. SAMPSON TREVETHAN, Jun. *Polwell, Jan.* 27.

THE NEW HARTLEY PIT ACCIDENT.

R,—The accident at New Hartley has, I am sorry to say, caused a very unjustifiable ck upon the Government Inspector for this district, who, I am sure, has always wn himself to be rather in favour of us than of the masters—I mean that he has er let the position and influence of the masters prevent him from doing all he could st safety for the men; and that he has always shown that he understands the collier nts more protection from the Inspector and the Government than the masters, because men have not the power to help themselves. I hear that the attacks which have n made on Mr. Dunn since the colliery accident will make him resign, unless they sion him off; and I hope that his experience and advice will not be lost for the sake few hundreds a year. A younger man might, to be sure, go into the pits oftener, I do not know that he would do more good in them.

am sorry that some of the men think Mr. Dunn has not done all he might, and that spection has not quite answered so well as it should. What I think is wanted is re Inspectors, not complaints against those now appointed. You said, long ago, that ry man above a common hewer ought not to be appointed until he gets a certificate he is fit for the duties he undertakes. All colliers who think at all agree with this. it be known amongst the hewers that the canny ist among them will be raised withthought of anything but their knowledge, and see how accidents in mines would rease.—*Seaton, Jan.* 27. COAL MINER.

R,—I am sure every Englishman will heartily re-echo the generous sentiments exssed by the Bishop of Durham at the meeting held in Newcastle on Friday last, on ich occasion his lordship eloquently eulogised the noble conduct of those brave men toiled, amidst danger and discomfort, to rescue their brethern buried in the Hartley w Pit. Drenched with the water that descended the shaft, and in momentary peril falling stones and noxious gases, they bravely persevered in their disinterested and mane efforts, and, even when carried away half suffocated by "stythe," they were dy to return again and again to the scene of action. The encomiums pronounced these noble fellows by his lordship and others are well deserved. They do honour e to those of whom they are uttered and to those who utter them. But should the tter end in words? Would it not be a graceful act for the nation, by some substantial token of approval, to acknowlege the heroic daring and fortitude displayed?

adorn our military heroes with Victoria Crosses and medals of honour. Why not at these heroes with equal consideration?

f a national subscription were opened, I am sure the people of this country would pond heartily and joyously to the call, and a sum enough, or more than enough, would be raised for the purpose. A gold medal might be struck; and while we know that Majesty has taken so deep an interest in the efforts to rescue the unfortunate miners Hartley, and expressed so lively a sympathy with the bereaved ones, may we not ture to hope that she would condescend with her royal hands to place upon the breasts these humble heroes of the mine a decoration so well deserved and so hardly won?

venture to trouble you with these remarks, hoping that some one of influence may e the hint, and initiate the movement.—*Wigan, Jan.* 28. W. M. H.

R,—It was my intention to have written to you and suggested the very words used Mr. George Shepherd, M.E., with reference to having cast-iron beams trussed. I uld not have troubled you with a note had I not observed that no one seems to ever ne the fact frequently under my observation, and, in this recent lamentable case, an portant one—that cast metal, undergoing great variation of temperature and constant ration, alters the crystalline formation of the castings of heavy masses of metal, which y perhaps be to some degree attributed to magnetic action; at all events, I have found reat alteration in specimens of castings after using for some time. May not your tical correspondents render service by giving some enlightenment upon the subject? *Westborough House, Scarborough, Jan.* 28. FREDK. CORNWALL.

R,—As you were good enough to insert a suggestion of mine in last week's Journal, n emboldened to offer a second to the owners of deep or extensive mines—that a supof food, and (in non-fiery mines) of candles and matches should be kept permanently derground. In every accident which prevents the egress of the men, one of the first stions that arises, after that respecting air, is—How are they off for food? to which, the majority of cases, the desponding answer is—They have only that which they k with them. Supposing the poor victims at the Hartley New Colliery had not been stroyed by the gas, what would have been their position as regards food. Clearly y would only have sustained life by subsisting on the animals accidently entombed th them. What a consolation it would have been to have known that they had a ply of food to fall back upon. Now, a perfectly insignificant outlay would provide a ficient quantity of food, say ship biscuit, conveniently packed in air-tight tins, with little brandy, and, where necessary, water; the supply to be calculated at the rate fifteen days' consumption for every man underground at any one time. It might be posited at different points of the mine, the whereabouts being made known to every an employed, and, as a "forlorn reserve," it would be placed under their common care, d as such would, no doubt, be held sacred. F. T. BARRY.

Adelaide Place, London Bridge, Jan. 27.

*** Several applications have been made to us to receive subscriptions for the Relief Fund; but we consider the best course is to address either the Lord Mayor or the Mayor of Newcastle-on-Tyne. We have adopted the latter course, and recommend our subscribers to "go and do likewise."

A COLLIERY NEEDS TWO SHAFTS.

SIR,—The late fatal disaster has proved to what fearful risks miners are exposed who work in a colliery to which there is only one outlet. If the New Hartley Pit had had, as most large collieries have, two shafts, all but a few of the 204 men and boys whose loss we are now deploring would never have been in danger from the accident which happened; the long days and nights of starvation, cold, and gasping for air, would have been spared them; their wives and mothers and children would not have had to endure their lengthening, torturing suspense, terminating in blank despair; several hundred families would not have been at one blow reduced from comfort to penury, with their misery embittered by the thought that if the mine in which their loved ones worked had been properly provided they would not have been bereaved.

It has been very naturally concluded that Parliament should be called upon to prevent a repetition of such a disaster, by at once enacting that every mine shall have at least two means of access, so that if one be obstructed by any accident the men may escape by the other. But would it not be well before applying for such legislation to enquire whether the existing law cannot be so worked as to provide a remedy? By the 17th section of the Mines Regulation and Inspection Act of 1860 (the 23d and 24th Vict., cap. 151, sec. 17) it is provided that any Inspector who may find on enquiry any colliery, or the works or machinery belonging thereto, or any matter, thing, or practice in or connected with such colliery to be dangerous or defective, so as in his opinion to threaten or tend to the bodily injury of any person, such Inspector shall give notice thereof to the owner or agent of such mine, and also report to the Secretary of State. If the owner or agent object to remove or remedy the danger or defect, he may within twenty days give notice of such objection, and nominate five or more mining engineers, or other competent persons of experience, of whom the Secretary of State shall appoint one or more, to determine the matter in difference by arbitration. If such owner or agent shall not give such notice, or make such nomination within 20 days, or if he shall not take active and proper measures for removing or remedying the defect, which, according to the award, ought to be removed or remedied, he shall be liable to a penalty of 1*l.* for every day he so neglects.

Now, it will hardly be disputed, after the late catastrophe, that the absence of a second means of escape, if the first should fail, is a thing defective in a colliery which does threaten bodily injury, and which the Secretary of State is not merely justified, but ought to order, to be remedied. It may, perhaps, be a question whether for every mine, however slightly developed, a second shaft must be insisted upon, but none will doubt that a mine employing 204 persons underground ought to have more than one shaft for pumping, drawing, for access, and for ventilation; nay, it may well be doubted whether it is even economical, to say nothing of safety, to trust so much to one channel. The ventilation of a large mine by one shaft is seldom satisfactory, and never secure. It has to be divided into two, for the descending and ascending currents of air, by a brattice—that is, a wall of timber and planks—which can scarcely be quite air-tight; a great part of the ventilating power, which is generally a large furnace, is thereby lost, by air passing from one division of the shaft to the other which ought to go through the workings; there must, therefore, be either worse ventilation, or a larger expenditure of coal to produce an equally effective current of air. But there is a far more serious objection—the brattice dividing a shaft may be broken by a comparatively slight accident, and thereby the ventilation of the whole mine suspended, and if the mine be foul every man in it put into immediate and imminent danger. No competent mining engineer will say that such a state of things is safe: though there may be difference of opinion as to whether small mines need two shafts, everyone will say that large mines ought not to have pumping, winding, and both upcast and downcast shafts altogether; there ought to be at least two. It is very true that to avoid so small a penalty as 1*l.* a day will not of itself be sufficient inducement to make a second shaft, not otherwise desirable, but a second shaft always is desirable, and it will often need only a small additional motive to those now existing to turn the balance. Moreover, men very much dislike paying constantly recurring penalties, even though the amount be inconsiderable. It is very annoying to have to pay money with nothing to show for it. Besides, to pay penalties rather than do that which arbitrators of his own nomination declare to be needed for the safety of his men would expose a mine owner to severe and just obliquy. He would have to risk a turn-out, and almost the certainty of increased charges for wages, for the attention of the men would be strongly called to the existence of the peril, and they would avoid it, unless tempted to encounter the risk by unusual inducements.

Whether the existing law will prove strong enough to enforce the required remedy or not cannot be told until it has been fairly tried, but it seems clear that its effect should be first tried; and, therefore, the Secretary of State should be urged to exercise the power with which he his wisely invested, by instructing the Inspectors of coal mines to report to him upon all mines where a second shaft ought to be provided. X.

SIMPLE TACKLE FOR DRAWING FROM MINES.

SIR,—I wish to obtain from some of your practical readers a solution of some questions as to the economy of drawing ore and attle (which I will call stuff, for shortness) from mines. Everyone knows that within moderate limits it is cheaper to work one engine, or two engines coupled together, than two of equal power independently. If, therefore, the kibble or cage to be raised from a deep mine be lifted by filling a tub or tank attached to the other end of the drawing rope with a sufficient weight of water, will there not be a saving over employing a separate winding-engine? Such drawing tackle is sometimes used in coal pits; it is as simple as possible. Two cages or frames are attached to each end of the rope, passing over a large shieve, at the shaft head, governed by a break, and at the bottom of each cage is a tank, big enough to hold water to overbalance a wagonfull of coal. A wagon filled with coal is pushed into the cage at the bottom of the shaft, and water allowed to run into the tank of that at the top. The lander, with a break, holds all fast until there is water enough to overlance the coal, and until he has the signal from below to haul away. He then lets go his break, the coal ascends and the water descends, and runs out of the tank by a valve opening from a spindle touching the bottom, and the cage is ready to raise another wagon of coal. Of course, unless there be an adit, something more than the weight of the coal has to be raised by pumping. But there is economy from using one large engine instead of two somewhat smaller, and it is the common belief that power is used to greater advantage in pumping than in winding. The extreme simplicity of this mode of drawing, the impossibility of over-weighting the rope, or of over-drawing the cage, are great recommendations. I wish to enquiry what are the disadvantages, and why the plan is not more generally adopted?

It appears to me that there are frequent cases where water-power can be used to greater advantage for drawing than either by turning a wheel or employing a horse or engine-whim. For instance, when the shaft is not deep, nor the weight to be drawn daily large, while there is a small supply of water, with a fall of, perhaps, 100 feet—or more than can be conveniently used on a wheel. For such cases I would suggest, as worth trying, one of the following plans. If the shaft be (say) 50 fathoms deep, and an inclined plane of the same length, with a fall of 100 feet, or 1 in 3, can be made within a moderate distance, all that seems necessary is that a rope be provided long enough to reach from the bottom of the shaft to the top of the incline, and that one end be attached to a cage, or frame, to work up and down the shaft, and the other to a truck or wagon, carrying a tub or tank of water, big enough to hold water something more than three times the weight of what has to be raised. If then the tank be filled with water from a launder at the top of the incline, it will, by its descent down the incline, draw the frame and its load up the shaft, with only a small loss of power to overcome friction and inertia.

In cases where there is no such fall in proportion to the depth of the shaft, I would suggest as cheaper than a wheel of large diameter the following:—Let the shaft-rope be wound round the cage or drum of a whim, the axle of which must be as much less in diameter as the available fall for the water below the launder is less than the depth of the shaft. Let a chain wound round this axle, and passing over a shieve, sustain a tub large enough to hold as much more water than the weight to be raised as the depth of the shaft exceeds the fall, and something more. When this tub is filled with water, and the break let go, it will sink, and by turning round the axle of the whim, raise the weight attached to the end of the rope wound round its drum. Such very simple tackle would be cheaper than either a wheel or engine-whim, very little dearer than a common horse-whim, and if the water can be got at all, it would be cheaper than horse keep.

It appears to me that there are cases where such tackle may be used to postpone the necessity of making an adit to diminish the height to which water has to be lifted—I mean in cases where that is the sole object of an adit. Supposing water to be lifted 10 or 20 fms. higher than a valley a few hundred yards off, of course it would save pumping to drive an adit at the valley level; but in the mean time a large part of the power consumed in raising the water might be saved by apparatus much cheaper than wheels. Let a launder convey the water raised with as little fall as possible to a point immediately above a drain at the lowest level accessible. Let a rope passing over a shieve at the end of the launder sustain a tub big enough to hold all the water raised by a stroke of the pump, and let the other end of the rope be attached by a long lever arm to the pump-bob. This lever arm must be as much longer than the bob-arm as the available fall is greater than the stroke of the piston. By this simple plan the force of the pump-lift will be increased as much as the extra lift requires (less the loss for friction and to overcome inertia), and there are, I believe, a good many cases where such a plan will save, or, at least, postpone, the need for an adit.

There may also be cases, though they are not likely to be common, where the simple tackle I have above suggested for drawing ore might be used for lifting buckets of water. It would be easy to make the tackle self-acting, so that when the tub rises to the launder it shall open a valve, which will close as soon as the tub begins to descend, and empty itself at the bottom by a spindle opening a valve in the tub as soon as it touches the ground, so that it will continue to rise and fall alternately so long as water is supplied from the launder. Such very simple apparatus may in some few cases serve instead of a horse-whim for raising water, until the quantity or depth is enough to render more powerful machinery necessary, and may afterwards be used as auxiliary to such machinery. X.

NEW ROUTE TO INDIA—COTTON SUPPLY, &c.

SIR,—There seems at present a great necessity for an expeditious, economical, and safe transit of goods, persons, and correspondence between Great Britain and the East Indies, not only on account of a cheap and permanent supply of cotton, and other eastern productions, but from the improved state of things in that country since Lord Canning's excellent regulations with respect to the sale of public lands, and the increased intercourse, social, commercial, and political, that of necessity will take place between the people of India and those of England, indeed, of Europe generally.

Now, I can see no better plan for facilitating this intercourse than my projected "Railway to India," which you published in a pamphlet 16 years ago; a desirable modification of which project may, with every prospect of success, be now undertaken by a joint-stock company, with a comparatively small amount of capital, and be progressively extended as the new traffic expands, which it surely would do, and that most rapidly, immediately on the new route being opened, if only to the extent stated below. To commence this important affair on the smallest possible scale to be effective, docks and a depôt station should be formed at or near to *Antioch* in *Syria*, from which station a rail to be laid to *Aleppo*, and from thence to the right bank of the *Euphrates* River, an entire distance of about 100 English miles; steamboats then to convey the traffic down that river to the head of the *Persian Gulf*, and sea-going steamers to proceed from thence direct to *Bombay*. Here would be a new route opened to India, presenting commercial and other facilities of intercourse far greater than that through Egypt and the Red Sea to Aden; the voyage from England to *Antioch* being balanced by that to *Egypt*.

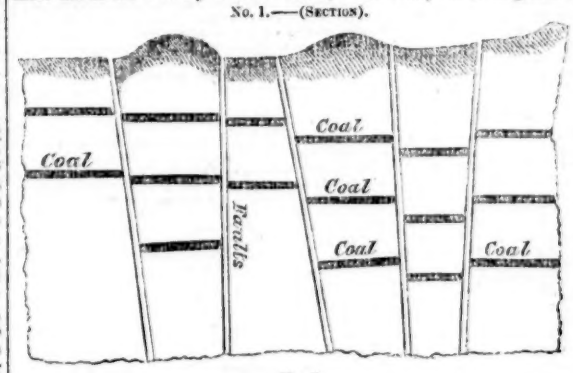
Now, this new route may be opened, with rolling-stock, &c., completed, for a million sterling, for which amount of capital an immediate return may be guaranteed of 5 per cent. per annum for the first *four* years, and 7½ per cent. afterwards in perpetuity, provided the *new principles of action* mentioned in the pamphlet above referred to be adopted and fairly carried out. When this 100 miles of rail are in work, extensions to be progressively made, not only in the direction of the *Persian Gulf*, but also to Bagdad, and the banks of the River Indus, without any further calls for capital from the shareholders of the proposed company. From the banks of the Indus the local railway companies of India would soon form branch rails in all directions through that extensive and prolific country; then, by extending the existing rail at *Trieste* to *Constantinople*, and another line from *Constantinople* to *Aleppo* (all of which to be undertaken by the proposed joint-stock company, on the *principles* above alluded to, and with their subscribed capital of one million sterling), there would, in reality, be an *overland route to India* opened, by which goods, passengers, and correspondence may be made in safety, and without much fear of "the dangers of the seas" to and from that splendid country to *Antwerp* or *Dover*, and to England by a short sea-passage, in about 12 or 13 days; and thus may *cotton*, and all other of the valuable productions of India (including a *penny post letter*), be most economically and expeditiously brought to England and to all the nations of Europe.

Bovey Tracey, Jan. 28. S. B. ROGERS.

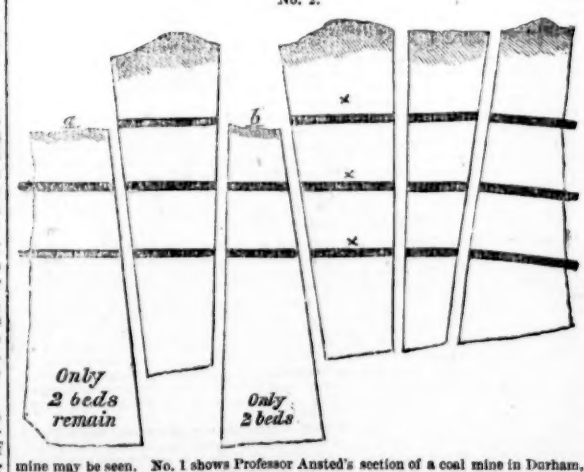
THE GEOLOGICAL FORMATION OF THE EARTH—No. XVI.

SIR,—Absence in Ireland prevented my diagrams being before the public sooner. They are on too small a scale to be as plain and intelligible as I should wish; but parties desirous of making themselves acquainted with the principle of action, and the laws by which such is governed, can have an opportunity of inspecting diagrams on a larger scale by appointing to meet me at the *Mining Journal* office, where many other diagrams of mine may be seen. No. 1 shows Professor Ansted's section of a coal mine in Durham, with the faults and shifts of coal beds, as he found on inspection. No. 2 shows the configuration the surface would present were the coal beds shifted to their original positions. It will be observed, in the portions lettered *a* and *b*, two beds of coal only are shown; the third, or uppermost, one having evidently been washed away at the time of the great deluge passing over the earth. It is clear from the sections referred to, and from sections made by myself and others, where they have been accurately taken from nature, that every shift must be looked for towards the apex of the wedge-piece. It is evident these wedge pieces slide past each other, and, to do so, those pointing downwards must be gradually diminishing in bulk, and the matter they had contained has become united with the pieces pointing upwards, otherwise the earth must be diminishing in bulk, which no sane man believes.

No. 1.—(SECTION).



No. 2.



It may be observed, on replacing the coal beds to their original positions in the sections, that they are diminished by one-twentieth of their former length; and I would

ask those who disagree with me on this important point how they account for the shifts and deficiencies in the coal beds, and how hills formed on the wedge pieces that are sinking? Volcanic eruptions never threw up these hills; were it so, coal beds would have been totally destroyed; besides, the downward wedge pieces soon terminate in a point, presenting no fulcrum for raising such hills. The wedge pieces pointing upwards, which have a base or fulcrum, would have been the most likely to have had mountains formed on them; but even in these the coal beds are not the least distorted.

Those who study mining will, I hope, pay particular attention to my sections and remarks, which I intend following by many others. In my next I shall refer to raised sea beaches, and marine trees and plants. NICHOLAS ENNOR.

VENTILATING MINES.

SIR,—Seeing such multiplicity of letters sent you weekly for insertion on this subject, to the exclusion of other valuable matters, caused me to notice that there are but three main points on ventilation for consideration—first, sink more shafts; second, how to draw the most air through the mine; third, how to force it through, and by which the most air can be passed at the least cost. After the air is sent into the mine it should be left for the practical men there to split or divide as they think best. Those chemical men who imagine that they can dissolve all the foul gases in a mine with a bottle of smoke, or even a bottle of acid, had better first try it in some old abandoned mine. I think they had better turn their attention in a different direction, and try experiments to see if coal mines are to be worked without ventilation, by sending in a sufficient quantity of compressed air to keep back the gases. NICHOLAS ENNOR.

P.S.—I have ever been an advocate for forcing air through mines, and not to draw it.

PETROLEUM IN DEEP GRANITE MINES.

SIR,—I noticed in last week's Journal Mr. Binney's remarks on this important subject, also Mr. Hunt's, who said he was aware that it had been found 30 years since in the great copper lode at Carharrack, from 70 to 80 fathoms deep, in granite: there being no coal in Cornwall caused him to come to the conclusion that it could not be of vegetable origin, but was formed by chemical carbonates of minerals or gaseous matters; this was certainly taking a good common-sense view of the cause. Mr. Binney states that all bitumens and petroleums were organic substances, and not formed from *brute* matter—a term I really do not comprehend. He further says, if found there it was not of great antiquity, as Carharrack great lode was formed in or about the year 1827, and the petroleum is more modern than that. Probably some one has informed Mr. Binney that W. Rodda a few years since accidentally caught a barrel of gas-tar on fire near Carharrack great lode, which so alarmed him that he upset it. Most likely Mr. Binney has come to the conclusion that a portion of it found its way into this great lode, and formed the petroleum. I beg to assure Mr. Binney that I can prove that Carharrack great lode was formed anterior to the great deluge which passed over the earth: whether that is 4000 or 40,000 years since I leave for Mr. Binney to say. I ask Mr. Binney if peat bogs were also formed from what he calls brute matter, and if his brute matter might not have systematically cut it round much shorter, and formed bitumen or petroleum, without first coming to the earth's surface to form peat? NICHOLAS ENNOR.

PROFESSOR PEPPER.—Press of matter prevents my reply: it shall be attended to in its proper place: I only here state that his letter was not what I expected.—N. ENNOR.

CHEMICAL ASSAYS.—Your correspondent, "N. S. S.," I think, must have come to the conclusion that I was as deficient in intellect as a young turkey. I beg to assure him I am not aware I want cramming, and to tell him that before I send samples of a stone the ore is bruised and passed through a hair sieve.—N. ENNOR.

GOLD IN WALES.

SIR,—In May last I wrote you a line or two about the gold produce of St. David's quartz lode in the Clogau Mountain, near Dolgelly, county Merioneth. I beg now to make a further statement of particulars. During the past year the total distance driven, sunk, and stoped was about 38 fms. The quantity of auriferous ore crushed and amalgamated by two of Berdan's machines was 449 tons 18 cwt., which yielded 580½ oz. of fine gold. In addition to this quantity, 6 tons 2 cwt. 32 lbs. of quartz, containing visible gold, was crushed and amalgamated by Britten's small machines, and yielded 2303 oz. 11 dwts. of fine gold—making a total of gold of 2884 oz. 1 dwt. from 456 tons of ore. This gold realised at the Bank of England 10,816*l.*, 6825*l.* of which has been distributed amongst the proprietors, being at the rate of 60 per cent. upon the capital invested.

The gold proceeds of the quarter ending Dec. 31, 1861, amounted to 4796*l.*—which will probably be the average quarterly yield for the present year. Such a result as this is remarkable, and proves that the gold ore of one spot, at the least, in Merionethshire is capable of producing gold in remunerative quantities. Since I read a paper on this subject at the meeting of the British Association at Manchester, in September last, I have had many communications respecting the superiority of stamping machinery over every other. My remarks at that meeting by no means condemned the use of stamps. It would have been impertinent in me to do so, having had so little opportunity of testing their merit on gold ores; but what I intended to convey was that, in consequence of the finely-divided state of the gold in the quartz and blende in the neighbourhood of Doigelly, it appeared to me impossible to prevent its escape during the ordinary operation of stamping. Indeed, I have collected gold upon sheets of paper in that condition from the surface of water. I am informed that the Sacramento River has been frequently seen with its surface covered with minute particles of gold. Whether all the gold in such condition can be saved or not, I do not attempt to say. I think not. Certain it is, it has not been put to the test in this country by labour skilled in that respect. The mode of extracting the gold at Clogau is as I have above stated. This is by no means the best that can be adopted; but it is very satisfactory, so far as it goes, and with such results as the Clogau arrangements to secure the least possible waste, will very soon be made in that district. I may add that I have myself extracted 11 grains of fine gold from a piece of quartz weighing 2 lbs. 13 oz., and not a particle of gold was discoverable in it by a powerful misceroscope. This fact makes me think that by the ordinary process of stamping and washing this gold could not all have been obtained, and probably none of it. I shall from time to time, with your permission, record facts of interest on this subject. The publication of this present success is so much to the credit of past failures.

Stretford, Manchester, Jan. 30. T. A. READWIN.

GOLD AND SILVER IN WALES.

SIR,—While prospecting around the Falls between Tyddyn-Glwadus and Cwmhesian, I noticed an adit that appeared to have been abandoned many years, but from what reason I cannot guess, unless it was because the workers of it expected to find ready-made sovereigns or silver coins to issue from their melting pots; as I challenge any metallurgist to disprove there are not lying at the mouth ores that will yield at least 1 oz. of pure gold, several ounces of silver, and many pounds of lead in a ton of matrix. One of the specimens brought away for analysis contains no less than six different metals—gold, silver, copper, lead, zinc, and iron, besides sulphur, lime, silex, &c.—therefore, I feel convinced any practical assayer could make the above lode pay well by separating only the most valuable metal from the vein in question. How thick the lode was that the above sample was taken from there was not time then to ascertain. Also, I wish to remark, should any solid grains of gold ever get liberated within the action of any upper current, it is ten to one such would be carried down the nearest waterfall into some hole below; consequently, since it can be seen at the base of the Rhaiadr-y-Mawddach and Pistill-y-Cain, small pools, so naturally formed that any practical gold-seeker could cause the rushing torrent to be turned aside, and basins to be emptied in a short time; and if the proprietors will expend (say) 10*l.*, and give me a quarter of the gold found, I will attend any time to bestow professional advice on the subject, and thus test whether metallic gold is in the upper soils, &c.—*Jan.* 23. G. F. GOBLE.

ST. JUST UNITED TIN AND COPPER MINES.

SIR,—I observe several of your correspondents have made some remarks upon this property, which is creating a great interest in this locality, on account of the preparations going on to open these mines upon an extensive scale, by a company recently formed in London for this purpose. Will you permit an old miner to say a word or two on these mines? I am old enough to recollect when the works stopped, on account of the low price of tin, at that time not more 35*l.* per ton, the same article now being of the value of 75*l.* per ton. I very well recollect these mines employed a large number of hands, and the distress created by the stoppage, and I am not surprised to see the excitement now created by the hopes entertained by the miners that these great works are to be re-opened, which will, no doubt, find employment for large numbers, and the opinion amongst them is universal, that large returns and profits will be realised. I was upon the mine this week, and was much pleased to witness the interest the miners are taking in the progress of the works, which are going on rapidly: the utmost vigour is being used to have the steam-engine, stamps, &c., erected, and working without delay. The situation of the St. Just Mines is much the same as the Botallack and Levant Mines, bounded on the north by Cape Cornwall, and lies in a beautiful channel of mineralised ground, quite congenial to the district, and cannot fail of being productive. The sett is extensive—it embraces 14 known rich tin lodes in the granite, and verging more or less as they go west into the killas. A copper lode of superior quality was discovered in the 40, west of the engine-shaft, only a short time previous to the stoppage of the old workings.

The late Capt. Rowe, who had the former management of these mines, did his utmost to get them into work again, and would have taken a large interest, but he failed. His recommendation at the time was to sink the engine-shaft 20 fms. deeper, where a junction of lodes met, and then continue the levels westward into the killas, where he had no doubt a vast body of copper would be discovered.

I fear, Sir, I must apologise for writing too much, but I share a little of the excitement of my neighbours. I see many of the miners are anxious to take bargains, and most who know the history of these mines are anxious to take an interest in the company. I have taken a few shares, as far as my means will admit; and such is the *bona fide* character of the undertaking, there can be no doubt it will be well supported, and prove an investment of great value.—*St. Just, Jan.* 27. RICHARD WARREN.

EAST CARN BREA.

SIR,—A fortnight ago I troubled you with a letter on East Carn Brea Mine; I shall feel obliged by your inserting a few lines from me again on the same subject. It is gratifying to be enabled to state that the mine has greatly improved; a course of ore has been discovered in the 50 west, or deepest level, worth 4 tons per fm.; the 40 east is worth 4 tons per fm., the 26 east worth 2 tons per fm., and having the appearance of being in a cross-course; a winze sinking under the 26 is worth 6 tons per fathom; and throughout it would be difficult to find a mine in Cornwall opening up so well.

At the meeting to be held about the middle of next month the accounts will show a satisfactory financial position; and at the following meeting a dividend may be looked for, when the shares may be expected to command a price more nearly approximating to their intrinsic merits. The general public were slow to believe in it; and as many jealous detractors were found against East Caradon twelve months ago, when shares were selling at 11*l.*, as now against East Carn Brea.

On the question of reserves, in my former letter, I gave measurements and values, dry details, that speak for themselves, and, after all, it is a perfectly arbitrary thing as to how reserves shall be valued, and still more arbitrary is the price a mine may command in the market, as compared with the reserves laid open. In the case of the Great Northern Copper Company of South Australia, in their report, just issued, their reserves are valued at 30,000*l.*, and the shares command in the market an aggregate of far over 100,000*l.* East Caradon reserves may be taken at about 90,000*l.* or 100,000*l.*, and the shares command an aggregate of about 180,000*l.* East Carn Brea at 60,000*l.*, and the shares command an aggregate of 60,000*l.*; but if taken at one-half, what has it to do with the value of shares? There are other points to be considered besides reserves, and who can put a value on a share in a mine like East Caradon or East Carn Brea? the latter working in almost virgin ground, on lodes that in a length of three miles have returned upwards of five millions sterling in profit, a fact without parallel in the world besides. A system that has obtained almost universal adoption since the introduction of the electric telegraph to Cornwall—that of inundating mines by "inspectors"—is, doubtless, useful at times, as a wholesome check; but the system is carried to excess, and used in too many instances for unworthy purposes. A mine captain must be the best judge of the value of the ground and lodes in his mine, and his opinion ought to be law, and to carry more weight than that of a man who, for an hour, hurries through hundreds of fathoms of ground he never saw before. If an agent be unworthy of credit, and deceives his employers, discharge him. But, on the other hand, the agents of our great undertakings in Cornwall will compare favourably with any class of men in this country, on a par with them in position. As to East Carn Brea Mine, there is nothing to fear from inspectors, or from criticism, and all that the proprietary have to dread is being influenced by the passing currents of opinions of parties, who either have no opinion, or whose interests speak, and not their judgment.—5, *Cowper's-court, Cornhill, Jan.* 31. GEO. BATTERS.

THE LLANTRISSANT AND LANHARRY HEMATITE IRON ORE AND COAL DISTRICT.

SIR,—A short time ago I saw in the Journal a very nice section of the Glamorganshire southern outcrop of coal, fire-clay, and iron mine, with some comments respecting the iron mine. I have just visited the Lanharry hematite iron ore, and, in justice, feel bound to say that, however sanguine the writer might have felt on the value of the iron mine, I have no doubt it will prove that he fell far short in describing its worth. The company signed the lease early in November, and at once set a contract to respectable persons to raise and deliver upwards of 35,000 tons of ore into trucks at the station at 5s. per ton, including plant and every expense attending the same, the selling price of which is, in these bad times, 10s. per ton. Ore of this description is usually sold subject to monthly payments, so that the company, turning its capital twelve times per year, will realise a profit of 1200 per cent. per annum. There is a large quantity of ore at the station; and, now the mine is cleared of the thin but firm cover of dolomitic limestone, it speaks for itself as to quantity and quality. No treasure was ever better placed. Being situated on the Lanharry Mountain, it has the advantages of a natural drainage and easy transit to the railway. A young man connected with the works took me over the estate, about 360 acres, and pointed out the various proofs made, which clearly shows an extent of iron deposit calculated to supply the largest works I have ever seen or heard of for hundreds of years; and now comes the astonishing part—viz., the ironmasters in Wales have been sending all over the world for iron ore, and this immense deposit, and that so near, known as the Mwyndy Mine, close at hand, and not, as in the Forest of Dean and other places, requiring deep pits and costly machinery, with three or four years' outlay in sinking, &c., before any ore can be raised. Here it is at surface, and in such abundance that no man can estimate its value. The contractors pay 1s. 8d. per ton to cart the ore to the station, which sum will be allowed off the contract price as soon as the railway is taken up to the mine, thus reducing the cost of this valuable material to the low and unprecedented cost of 3s. 4d. per ton delivered into railway-trucks.

The coal mines are a continuation of Messrs. Vivians, Fords, and Tondu Company's coal workings, the value of which are too well known to require comment. The old men have paid a visit to each vein of coal at the outcrop, thus exposing to the owners a clear proof of the existence of each vein or seam. The best coking coal, being about 11 or 12 ft. in thickness, known as the Faur coal, is of immense importance to this property, of which it seems the company have about 200 acres, in connection with the other veins, which are equally good in quality, though not quite so thick. My informant told me that it is the intention of the company to open the coal field in the ensuing spring. I only regret I could not spend another day in this district, as I firmly believe there are other hidden treasures to be found, which lie at present in this curious formation and rich district unsuspected, consequently unsought for. I am pleased to hear that the Mwyndy Iron Company have resolved to erect smelting furnaces at once, which, in my opinion, is a wise and economical course, as the cost of transferring 60,000 tons of ore per annum to other works cannot be less than 20,000*l.*, which sum will be saved to the company, in addition to other advantages, such as converting all the poor ore (which cannot be sold) into a profit. I believe iron can be made at either of these places at a less cost than at any place in Great Britain; not that I can expect all the ore from these vast deposits will ever be converted on the spot, as doubtless each company will see it to be its interest to supply ore to the trade, however much they may convert on their own property. E. THOMAS.

Meetings of Mining Companies.

UNITED MEXICAN MINING ASSOCIATION.

An ordinary half-yearly general meeting of proprietors was held at the company's offices, Finsbury-circus, on Wednesday,—Mr. CHARLES MORRIS in the chair.

Mr. W. M. BROWNE (the secretary) having read the advertisement convening the meeting, submitted the report of the directors. It stated that the directors had not only to report that the affairs of the company were in a prosperous condition, but had also the gratification of stating that since the meeting held in July last they had been enabled, by remittances from Mexico, to pay off the whole of the loan raised in 1854, and the bonus of 25 per cent., amounting together to the sum of 20,848*l.*, besides the sum of 1632*l.* for interest, so that the future profits would be available for dividends. This most satisfactory result had arisen from the continued productiveness of the mine of Jesus Maria y Jose, the returns from which in the quarter ending June 30 last amounted to $176,951, and the expenditure to $107,063, being a profit of $69,887, and for the quarter ending September the returns were $178,945, and the expenditure $111,149, giving profit of $67,796, making a total profit on the six months of $137,683, of which the company received $107,087, and the owners of the mine $30,596. The quantity of ore raised for the same period was 38,240 cargas, 29,640 being raised by the company, and 8600 by the buscones. As regarded the Zacatecas indemnity, it was stated that in October last Mr. Fitzherbert again forwarded to the British Consulate a statement of the company's claim against the Mexican Government. The amount remaining due on Oct. 31, 1861, was $61,497. The company had also a further claim on the Mexican Government of $6043 for more recent losses, which has also been applied for.

The CHAIRMAN said he certainly had great pleasure in moving the reception and adoption of the report, because the board could very strongly congratulate the proprietors upon its contents. The last time she had the pleasure of meeting proprietors he certainly thought they would not have so satisfactory a return during the ensuing two quarters as they had had during the six months preceding. But they had been, he was glad to say, agreeably disappointed, for the return had not fallen off. For instance, the profit for the quarter ending March realised $57,000, for the quarter ending June $69,887, while for the quarter ending September the profit was $67,796. Upon the whole, the mine had been steadily improving, and he might safely say, without wishing to raise false expectations, that, so far from the returns falling off, there was reason to believe they will be increased. Mr. Fitzherbert had thought fit to re-open the old shaft for the purpose of facilitating the extraction of the ore. From this it was not to be supposed they were about to incur any considerable expense, but it was reasonable to suppose the extraction of the ore might, to a certain extent, be increased. He knew when they began to talk about a shaft people were apt to think they were about to incur an expensive operation; but in their case they were about to clear and repair an old shaft, the expense of which would be very trifling. The last time he had the pleasure of addressing the proprietors anarchy was prevalent in Mexico, and he then ventured to hope that the nations of Europe would interfere. Since that period an intervention had taken place, and he could not help thinking they were justified in supposing that good results would arise. If tranquility should be restored commercial benefit must follow, in which the company, no doubt, must participate. They had hoped to have been in possession of the advices received by the mail with some further information with respect to the conducta concerning which no intimation was had by the last mail, and to have found that Mr. Fitzherbert was in a condition to have remitted a sum of money. It was to be hoped that he would be able to send regular remittances, a part of which would be applicable to the purposes of dividend. There was another subject to which he would call attention; it had been said that by some it was thought desirable that the company should be registered with limited liability. He was bound to say on the part of the board that they had no very strong feeling upon the subject, but at the same time they all joined in wishing to do that which was most agreeable to the majority of the shareholders. Therefore, if at the present meeting the majority of the shareholders evinced an inclination that the company should be placed under the Limited Liability Act, the board would in all good faith take the proper proceedings to carry it into effect. There were some difficulties in the way, but he did not say they were insuperable.

Mr. SPENCER HERAPATH, in seconding the proposition for the adoption of the report, wished to initiate the discussion upon the question of limited liability. Next to the material prosperity of the association, there was no question of graver importance than that of limited liability. There were certain intricacies associated with the early history of the company, and in carrying out the object in view there might be some little difficulty. But if there was a will to carry out limited liability it could be attained. In their company it could be easier attained than in others which were registered with unlimited liability, because those companies must be absolutely dissolved. But their company was not registered, and from a conversation which he had lately had with the solicitor, he was able to say that the difficulties were not great, compared with the carrying out of so desirable an object as that of limiting the liability of shareholders. Another inducement was that it would prove commercially beneficial, which was also to be desired. Everybody liked to see their property stand well, and if shares were bought cheap, it was desirable to see them stand at what was believed to be their intrinsic worth, and that could not be regarded as an unworthy object. The company, as at present constituted, excluded from its list of shareholders a most respectable class of investors—wealthy men, who would not jeopardise what they possessed just for the sake of obtaining a dividend. There was every confidence in the board, and the proposition now made did not in the slightest degree militate against that confidence. But, so to speak, the board were temporary, for the lives of the gentlemen who constituted it could not be insured. They might have successors, and a variety of circumstances might occur which could neither be foreseen nor foretold. They wanted not merely *de facto* security, but *de jure* security, and the present meeting should give such a unanimous opinion upon the subject, that the board might see proprietors were prepared and willing to make an earnest, determined effort to obtain limited liability, and the object would be achieved.

Mr. SNOW suggested that, as was usual in all companies with an *ad valorem* duty, their report and accounts should be sent some days before each general meeting to each shareholder registered upon the books.

The CHAIRMAN did not see what advantage could be gained by such an arrangement, seeing that the half-yearly report which was presented to proprietors was but a condensation of the monthly reports, the contents of which were patent long before the meeting. At the same time, there could be no objection to the suggestion being adopted.

Mr. J. PHILLIPS said if limited liability was determined upon—which was probable—it might then become a question whether the report should not be sent to proprietors before general meetings. In answer to a remark made by Mr. Goddard (who at an earlier stage of the proceedings stated that the new shaft had cost 14,000*l.*), he (Mr. Phillips) wished to state that the work referred to had not cost much more than 8000*l.* It was true 16,000*l.* was raised, but 8000*l.* of that was spent on general work in the mine in bringing it into a productive state, and there was unquestionably very good reason to be satisfied with the outlay expended, seeing that during the last half-year there had been paid back no less a sum than 20,000*l.* But for the comparatively small expenditure incurred in sinking the shaft, the concern must have been abandoned some time since.

Mr. GODDARD explained that he did not cast the slightest imputation upon the policy of expending the amount which had been incurred in sinking that shaft, for he was as fully convinced as Mr. Phillips that the expenditure was judicious, but it did not follow that a similar outlay upon another shaft would produce similar results.

Mr. PHILLIPS reminded the hon. proprietor that it was not intended to sink another shaft, but simply to repair an old one, which would not incur an expenditure of more than $5000; it was only required to a depth of about 140 varas, about the depth of the San Andre's level. It would greatly facilitate the raising of the ore, and it was quite possible the extraction might be increased.

The report and accounts were then unanimously received and adopted.

Mr. SNOW proposed, and Mr. E. COOKE seconded, a proposition that a copy of the report and accounts should be sent to each shareholder a week or ten days before the holding of the ordinary general meeting; but it was subsequently arranged that the proposition should be accepted as a suggestion to the board.

Mr. SPENCER HERAPATH proposed, and Mr. SURGEY seconded, a proposition to the effect that the meeting was of opinion that it was desirable the company should be registered with limited liability, and that the directors be, and are hereby, requested to take necessary steps for that purpose.

The resolution being put, was carried unanimously, upon which

The CHAIRMAN said the board would take the proper steps, and endeavour to carry the wishes of the proprietors.

Votes of thanks having been passed to the Chairman, directors, and secretary, proceedings terminated.

DUN MOUNTAIN COPPER MINING COMPANY.

An ordinary general meeting of proprietors was held at the London Tavern, on Thursday, Mr. Deputy CORNEY in the chair.

Mr. F. SAUNDERS (the secretary) read the notice convening the meeting, and the minutes of the last were read and confirmed.

The report of the directors stated that since the last half-yearly meeting, under the energetic superintendence of the engineer and manager, Mr. A. Fitzgibbon, who had been assisted by the most effective and cordial co-operation of the Nelson committee, the Dun Mountain Railway had made rapid strides towards completion, and notwithstanding the severe winter season, heavy floods, and the failure of the one of the contractors, the opening of the line from the mines to the port was promised to take place on or before March next. By the railroad the mineral wealth could be shipped at a very moderate rate, which, with the anticipation of a reasonable freight home, would land the ore in England at a very moderate cost. The report gave a lengthened description of the company's property, which comprises the original mining freehold, consisting of 1687 acres, portion of which were full of chrome ore, 3500 tons being prepared for shipment, and 10,000 more in sight, and likely, as described by Mr. A. Fitzgibbon, to yield at least 4000 yearly for many years to come, with copper deposits scattered over the property, which may eventually lead to satisfactory results. Land to the extent of 2138 acres, on both sides of the railway from the mines to the Brook-street entrance to Nelson, a great portion of which is covered with fine wood and other good timber, and contains also limestone, which, it is expected, will yield a profit when the railway is completed. Land sections at Brook-street end, about 30 acres, carpenters' shops, smithy, stabling, &c. town acre and warehouses in Nelson and in Haven-road, all of which have cost a considerable sum, as per audited financial statement.

The CHAIRMAN, in moving the adoption of the report, said it was gratifying to that, notwithstanding the difficulties with which they had had to contend, the railway from the mines to the port of shipment would be completed by about the beginning of March, when the chrome ore could be brought to Nelson, and immediately shipped for England. During the construction of the railway it had been necessary to purchase land on both sides of the line, at the Brook-street end as well as in the centre of the town of Nelson, to provide a chrome ore depôt—that had been a necessary outlay, the advantage of having a depôt for chrome ore being that cargoes would be ready at all times for vessels that might come to the port, by which freight would be obtained upon the best terms. Among the other sources of income with the company was that of producing large quantity of wood for fuel, for which in Nelson there existed a great demand, having an extent of about six miles of forest land, there was sufficient timber to supply Nelson for many years to come. From the fire-wood branch of the business alone Mr. Fitzgibbon computed there would accrue a profit of about 1000*l.* per annum. Up to the present time the company had been expending its capital before it sought an income, but now that expenditure had nearly ceased, and it was most confidently anticipated that returns would be such as even the most sanguine could desire. In the purchase of land which had recently been made on behalf of the company there was a very large deposit of chrome ore, which was exclusive of those in the other portion of the company's property, so that in enlarging their borders they were considerably increasing the quantity of that material, upon which they so much depended. The town section of their property were enhancing in value every day, and as the town became more populated the value of their property would still be further increased. There was no doubt, however, that the expenditure incurred upon the property and railway had somewhat exceeded the calculations which the directors had made, and, therefore, they were obliged to ask proprietors for authority to increase the company's capital. Mr. Fitzgibbon they had a very active and efficient manager, and seeing that at the beginning of March all the works would be in active operation, from which time chrome ore would be brought down in quantities ready for shipment by every available vessel, he thought proprietors would agree with him that their prospects were of a cheering character. The company's Chairman (Mr. Rogers), whose anxiety for the welfare of the undertaking they all knew, had sent a note apprising them of the very interesting and important fact that a friend of his, Dr. Medlock, a professional chemist, had succeeded in producing from some of the company's chrome a most beautiful bright green colour, which it was expected would supersede those colours which were now being so much inveighed against from their containing arsenical proportions, which were so prejudicial to health. The French Government had forbidden the use of these dangerous colourings, upon the ground that they induced consumption, and it was very probable that step would be followed by our own Legislature. Mr. Rogers regarded the discovery of this harmless green colour as one of great importance. In the note received from him it was stated that this green mixed with oil or water, and that as it was of a permanent character, and not containing any arsenic, it was likely to be in great request. He then read a statement which had been prepared by the secretary, showing that there had been lately expended for horses, wagons, and buildings, 1000*l.*; for cutting the bush along the line and improving the drainage, 800*l.*; for improving Brook-street insisted upon by the Nelson board of works, 1000*l.*; and 1000*l.* for superintendence. There had been sent out from England 2000*l.* worth of extra rails, wagons, &c., to the railway from the port, so that there had been sent out about a mile of rail more than required; and 1000*l.* had been paid for land at the Brook-street end. It would be seen, therefore, there had been an expenditure of 6800*l.* beyond the amount contemplated. But for the whole of the capital invested they were justified in believing that a satisfactory return would be made.

A PROPRIETOR having seconded the adoption of the report and accounts,

Mr. PALLISER enquired whether the Nelson committee were paid for their services and whether they were shareholders?—The CHAIRMAN said, up to the present time that committee, as well as the board of directors, had given their services without remuneration; the whole of them being exceedingly anxious for the welfare of the concern, they did not denude it of any of its capital, but he could not promise that when the company was in full profitable working order they would not expect the remuneration due. The whole of the members of that committee were men of position in the colony, and were also large shareholders in the company. The chairman of that committee (Dr. Munro) was the Speaker of the Legislative Assembly.

Mr. PALISSER enquired what would be the probable freight of the ore from Nelson to England?—The CHAIRMAN replied, that assuming there was a quantity of ore ready for shipment, which was their ambition, so that vessels requiring ballast could at all times be supplied, the freight would, perhaps, not exceed 10s. per ton; but if the ore had to be sent by way of Sydney, the cost would probably be 30s. per ton. At all events, several offers had been made to bring the ore home in cargoes of any quantity at 2*l.* per ton. Under any circumstances, therefore, the chrome would produce very handsome dividends, seeing that already 60 or 70 tons had been sold at 10 guineas per ton.

Mr. PALISSER considered the reply very satisfactory, because he had been informed by a gentleman of some experience in New Zealand and the colonies that the ore could not be transported to England under 5*l.* per ton.

Mr. R. PORTER said that statement was completely answered by the fact that several offers had been made to bring the ore to England regularly for 2*l.* per ton.

The report and accounts having been received and adopted, Messrs. R. Porter and Piper were unanimously re-elected directors, and the auditors were reappointed.

The CHAIRMAN, in answer to a question with regard to the copper which had recently been found, replied that it was the opinion of Dr. Hochstetter, the great German geologist, that the mountain contained bunches of copper; but the directors had forbidden any expenditure being made in its exploration, at any rate until the company's finances were in a more satisfactory condition.

The chemical broker of the company, in answer to questions, stated that he would have no difficulty in disposing of 3000 or 4000 tons of the chrome ore annually. He believed the green which it had been found capable of producing must supersede the ordinary greens which, from containing so much sulphate of copper, were so prejudicial to health, and for that reason their use had been prohibited by the French Government. He then read a quotation from Dr. Muspratt's "Chemistry," showing the various uses to which the chrome could be applied. There could be no doubt as to the quality of the ore which had been sent home, as that had been proved by the price it had realised.

A resolution was then proposed to the effect that the directors be authorised to raise any additional funds they may deem desirable for the use of the company, not exceeding 10,000*l.*, the same to be raised, at the discretion of the directors, partly by the creation of additional shares, and partly by the issue of debenture bonds, or by one of such ways and means, and both, or either of them.

A protracted discussion ensued upon the question whether the additional capital required should be raised by the issue of additional shares or by debentures, when an amendment was proposed by Mr. KING, and seconded by Mr. SCHMITT, to the effect that the directors be authorised to raise any sum, not exceeding 10,000*l.*, by the issue of new shares at par, *pro rata*, to the present shareholders. The amendment, being put, was lost by a large majority, and the original resolution was carried unanimously.

In accordance with the provisions of the Articles of Association, the decision was confirmed by ballot. A vote of thanks was then passed to the Chairman and directors, when the proceedings terminated.

NEW CROW HILL MINING COMPANY.

The annual general meeting of shareholders was held at the offices, Crown-court, Threadneedle-street, on Wednesday, when the accounts were submitted and approved, and other business transacted, in accordance with the rules of the company. The proceedings were altogether of a satisfactory character, for it was shown that the prospects of the undertaking have steadily improved, in accordance with the opinions of all the mining captains and others who have inspected and reported upon it professionally (and whose views, indeed, have singularly coincided with respect to its prospects and development), and the following details will show that great progress has been made in the works, which are now verging closely upon the point which the adventurers have persistently kept in view, as promising the results they have felt justified in anticipating.

Since the last annual meeting the committee have kept two main objects constantly in view—1. Sinking the main shaft perpendicularly, so as to be able to cut the lode at a sufficient depth below the slide.—2. Laying open as much productive ground as possible in the upper levels. 1. The shaft is now down to close upon the 70, which is about the depth (70 or 80 fathoms) at which the late Capt. Champion, of East Wheal Rose, anticipated it would make a great deal of ore, and as the water has very much increased at this depth, and from the direction of the lode the agents consider that they are now approaching it, and are preparing to drive in order to cut it, which they anticipate will be done within three months. It is a favourable feature that the lode is found to be richer for lead in the 55 than in the 35, thus far confirming Capt. Champion's views—that it will be found rich for lead in depth.—2. Besides working at various points in the upper levels, which were found sufficiently productive, communications are being made by winzes and rises between the 15 and 35, and again between the 35 and 55 fm. levels: these will be completed in a few weeks, and a large extent of productive ground will thus be laid open, and ventilated for working away, by which the produce of the mine may be considerably increased. During the year 1861, 17¾ tons of lead have been sold at prices varying from 18*l.* 17*s.* 6*d.* per ton. This was the produce of the six heads of stamps already on the mine, but twelve more heads have recently been added, on the recommendation of the agents, who considered that the increased produce required this additional number—the whole 18 heads are now at work. The committee have taken great pains to find a market for the blende and mundic on hand, and have recently succeeded in making contracts for both. The price obtained for the mundic is low, in consequence of the great depression in the alkali trade, caused by the civil war in America, which country has taken about 55,000 out of 101,500 tons of soda exported annually. It is to be hoped that the cause of this depression may soon be removed, and as the exports to France are increasing under the new tariff, the demand for that article may then be greater than previously.

It may be mentioned that it transpired at the meeting that one of the large shareholders had, for his own private satisfaction, employed a professional mining agent to inspect the property, and that his report was of the most satisfactory character, and fully corroborated the opinions of the company's own agents. It appeared also that, with the exception of less than 10*l.*, all calls had been paid up; and a fresh call of 2*s.* per share

...ns made to meet the liabilities which had been incurred in erecting the new stamp-...ads, in making a tramway, and other matters necessarily more expensive than in the ...rlier stage of the works.

LOWER TALDRWS AND CLODD-FA-COED SLATE CO.

An extraordinary general meeting of proprietors was held at the company's offices, Bucklersbury, on Tuesday. Mr. P. A. Moore (the company's Chairman) having been unavoidably detained in Ireland, Mr. JAMES BANCKS, upon the proposition of Mr. PATKINSON, seconded by Dr. A. DENDY, was called to the chair.

Mr. P. J. KEARNEY (the secretary) read the notice convening the meeting, and the minutes of the last meeting, which embodied a resolution reducing the number of shareholders necessary to form a quorum to constitute a general meeting to 13.

The CHAIRMAN said the object of the present special meeting was to confirm the resolution just read, which was passed at the meeting held in Dec. last. He would ask the proprietors formally if there was any objection to that resolution being confirmed upon the present occasion?

The question being put, the resolution was unanimously confirmed.

The SECRETARY said that the general feeling expressed by the shareholders at the last meeting was that the future ordinary general meetings of the company should be held in the months of June and December, many of the proprietors being in town in those months who were absent in others.

The CHAIRMAN said the board were very anxious that the time for holding the general meetings should be such as to ensure the attendance of the largest number of proprietors. After some discussion, it was proposed from the chair that the future ordinary general meetings of the company should be held half-yearly, in the months of June and December, on the second Tuesday of each month.

The resolution was put and carried unanimously.

A vote of thanks to the Chairman was passed, when the proceedings terminated.

FOREIGN MINES.

ALTEN AND QUÆNANGEN MINES.—Report from Dec. 13 to Jan. 3: ...lipas: In the 20 fm. level working, the vein is from 6 to 8 inches wide, composed of ...od saving work. In the 10 fathom level north-west the lode continues about the ...me size as before, but is somewhat less rich in solid ore; it now turns out about ...tons of dredgework per fm. The south-west lode, in the 10 fm. level, and shallow ...orkings, varies from 10 to 15 inches in width, yielding on an average 1½ ton of ore ...r fm. The other small workings do not present any new feature calling for remark.—...d Mine: We have driven the 10 fm. level about 2½ fms. on the branch alluded to in ...r last, and are now satisfied about its being the principal portion of the lode; it is ...½ ft. wide, composed of a congenial looking calcspar and chlorite, with ore dissemi...ted throughout, worth about 1¼ ton per fm. For some 20 or 30 fms. past the lode ...s been accompanied on the hanging side by walls, beautifully defined, differing only a ...w degrees in their direction and dip from that of the lode, frequently dividing the ...tter into several parts, with a portion of the stratum between; it has, consequently, ...en difficult at times to decide on which part to drive. The 10 fathom level south roof ...ope looks well, where the lode is 5 ft. wide, worth 4½ tons of ore per fm. The other ...ope in this roof has somewhat deteriorated since our last; the lode is from 7 to 8 feet ...ide, chiefly composed of a friable quartz, with small portions of ore irregularly interfixed; we have reduced the size of the work to a level, in order to get forth faster, and ...pe shortly to strike another run of valuable ore ground. In Bergmester's stope the ...de is 8 ft. wide, with some good orey work near the footwall, worth 1½ ton per fm., ...ith an improving appearance. In the 10 fm. level, north of No. 1 winze, the lode is ...ft. wide, yielding some saving work, with a much more promising appearance than ...hen we began. The working south of Pederson's rise has latterly been unusually ...artzose, and the ore more disseminated; the present width of the lode is about 6 ft., ...orth 3½ tons of ore per fathom, the indications leading us to expect a speedy ...provement. In the foot stope north of the rise the lode is from 5 to 6 feet. wide, ...elding about 3½ tons of ore per fathom. The lode has not materially altered ...Pederson's rise, which is 3 feet wide, and yielding 1½ tons of ore per fathom. ...the pitches further north the lode varies from 2 to 6 feet in width, where the ore is ...ther irregular; but we expect they will raise sufficient to leave them earnings. The ...spects continue favourable in the midway level south, where the lode is composed of ...lcspar and quartz, with about 2½ tons of ore per fathom intermixed. In the event of ...e lode in the midway level continuing to develop itself so favourably going south, it ...s occurred to me that another cross-cut from the tramroad level will be a very de...irable undertaking. I have been looking over the ground, and think about 20 or 30 ...thoms in from the entrance will be a suitable position for it, where we have put a ...uple of men to ascertain the character of the stratum, &c. We will further look into ...is, and hope in our next to lay the particulars before you. Our principal stopes were ...t so rich in December as during the two previous months, but the general prospects ...ntinue good, and we view the recent change as only temporary.—United Mines: We ...ve a few hands tributing in the 35, on Woodfall's lode and one or two other points, ...ho are raising some good-quality stuff. At Michell's we are working in the roof of ...e lobby level, on the lode we laid open in the autumn, which is about 2 ft. wide, orey ...roughout, worth 2 tons per fathom. The report from Quænangen has not yet come to ...nd; but I do not expect there is much alteration to note, as the weather during the ...st fortnight has been unusually severe, and has, doubtless, greatly interrupted their ...erations; indeed, here, at Kaafjord, which is far more favourably situated, we found ...almost impossible to carry on the dressing, everything being buried in masses of ...ow. If the same unfavourable weather has been experienced at Quænangen our re...rns for the last month will be below the usual quantity.—C. TRELEASE.

CLARENDON CONSOLIDATED.—J. Martin, Jan. 6: Stamford Hill Mine: ...ere has not been anything done towards sinking the winze below the 82, or driving ...e 94 south-west, since I last wrote, owing to the water being left in at the time of ...anging the pitwork; but we shall commence sinking the winze and driving the 94 in ...r or five days from this date. The three English and six native miners are now engaged ...pairing the shaft and putting it right, in order to commence the sinking below the 94. ...e ground in the 82 cross-cut north is without any alteration to notice. The lode in ...e 70 south-west is 3 ft. wide, composed of light killas and prian, with mundic, and let...g out a large stream of water, which has very much increased the water on the en...ne, and has drained the 46 all but dry; I think this is a good indication. The lode in ...e 46 is 3 ft. wide, composed of gossan, green carbonate, and mundic, with black and yel...w copper ore; although it is a pretty-looking lode, it has not ore enough to value. ...e have driven about 16 fms. through a lode worth in places from ⅛ to 1 ton per fm. ...the 70 is cutting down the water from this level, we shall be able to sink a winze, so ...to prove what this lode is. We are still pushing on the dressing, and shall have by ...e middle of this month about 5 tons to take to wharf, with the 8 or 9 tons already ...re. We have been looking over the piece of ore ground in the bottom of the 82, on ...e north lode, and find that as soon as the winze has been holed from the 82 to the 94 ...e shall have a great many tons of good ore to take away at this place.

COPIAPO.—G. Matthews, Dec. 15: Checo: In the 20 fm. level north the ...de in the new chiffon is not so wide as when last reported, but contidues to produce ...out the same quantity of ore. In the 40, at Price's shaft, the lode in the rise is much ...e same as when last reported on; in this rise we have a good lode of ore, about 4 ft. ...g, but it does not extend away in the ends as yet. The lode in the chiffon under the ...is just the same as last reported. In the 40 end, driving west, the lode is 1½ ft. ...de, producing good stones of ore. In the 20, on the main south lode, the lode in the ...iffon sinking east has become poor, but we have in this part a little ore in sight, that ...ll about pay to take away. The lode in the new chiffon is still poor.—Western Sett: ...e have forked the water at this depth, and shall commence to sink under the 10 in a ...w days. We may expect a good many barrels of water until we get down under all ...e old workings; and, once drained, the water will not be much. We have commenced ...drive a cross-cut south on the lode in the 50, east of Price's shaft, on speculation. ...e mine is looking favourable.

PACHUCA.—Capt. Paull, Dec. 23: Since my last we have driven through ...veral varas of a very promising lode in San Juan level; underground it appears to be ...tal of good ley, but the highest assay I had made only produced 6¼ marcs per mon...; with the exception of the stones I mentioned in my last, that assayed 66 marcs, ...ich I now think came from the tabones part in San Juan, where we have occasion...y found stones of the same colour, but not containing more than 2 or 3 marcs; I ex...ct, as we get further in the hill, and deeper, the ley will improve. The lode in the adit ...t present composed of gossan-coloured stuff with quartz, and a branch of very blue ...ones to the south; the ground is very soft, and requires timber all the way. In San ...an shaft there are branches of soft quartz to the south, letting out 6 and 7 skins of ...ater daily, on the north part Tabones, and in the middle a ridge of hard stone. Here ...also requires timber in every part. The ground is hard for driving at present in San ...ls: we have left several branches to the south running parallel with the Viscaina; ...the ground continues hard, I think it would be advisable to drive a cross-cut, and in...rsect the Viscaina, as the end is now 120 varas from surface.

LINARES.—Jan. 18: Pozo Ancho Mine: West of Engine-shaft—South ...de: The lode in the 95, west of Seguro's winze, has greatly fallen off since our last, ...t we expect an improvement daily. The lode in the 85, west of Seville winze, is ...all, and the ground hard for driving. The ground in the 61, east of Warne's engine...aft, is moderately easy for driving. The same level west is worth 2 tons per fm.—...de of a very promising appearance. The 51, west of Toberneta winze, is worth 1 ton ...r fm.; this level is opening tribute ground. The 41, west of Crosby's shaft, is worth ...ton per fm.; lode large, chiefly composed of soft granite and lead ore, and letting out ...reat quantity of water.—East of Engine-shaft: The 95, east of La Suerte winze, is ...orth 1 ton per fm.; the lode has declined in value since our last report. The 85, east ...San Eduardo winze, is worth 1 ton per fm.; lode large, spotted throughout with lead. ...e 75, east of Taylor's cross-cut, is worth 2½ tons per fm.; the lode is much improved ...ce our last report, and, from its having taken a very northerly bearing, we think it is ...ned with one of the middle branches.—North Lode: The 75, east of Ordonez winze, is ...orth 1 ton per fathom; lode still large, but not so leady as formerly. The 65, east of ...maso's winze, is worth 2 tons per fm.; this is a very strong, kindly, and valuable ...de. Lupion's cross-cut south, in the 65, has passed through the lode alluded to in our ...st. After holing Seron's winze we shall commence driving east and west on the course ...the lode.—Shafts and Winzes: The ground at the engine-shaft is hard for sinking; ...e work is also retarded by the difficulty in keeping out the water. Ochoa's winze is ...orth 1 ton per fathom; the lode is chiefly composed of gossan, soft granite, and lead. ...icholas's winze is worth 2 tons per fm.; lode very wide, consisting of calcareous spar ...d lead ore. Casa's winze is worth ½ ton per fm.; lode still very unsettled. Marin's ...nze is worth ½ ton per fm.; lode small, and the ground hard for sinking.

FORTUNA.—Jan. 18: Canada Incosa—West of Taylor's Engine-shaft: ...e ground in the 7th level, west of Gomez winze, is more favourable for driving; the ...de is still small, and spotted with lead. The 6th level, west of O'Shea's winze, is ...orth 1¼ ton per fathom; the lode is a little more open and productive than when last ...scribed. The 5th level, west of Henty's shaft, is worth ½ ton per fathom; the lode ...not looking so promising as formerly. The 4th level, west of Rendon's winze, is worth ...ton per fathom; the lode is divided into two branches, and consequently less produc...e than formerly. The lode in the 3d level, west of Judd's shaft, continues small and ...or.—East of Taylor's Engine-shaft: The lode in the 4th level, east of Canton's winze, ...s undergone an unfavourable change during the last few days. The same level, west ...Donaigre's winze, is worth 3 tons per fathom; this end has been continued on a splendid ...de since our last; it consists of decomposed granite and large lumps of lead. The 3d ...vel, east of Carro's shaft, is worth 1½ ton per fm.; this lode continues to open valu...le tribute ground. There is no improvement to notice in the 2d level, east of Barto...mes winze.—Shafts and Winzes: The lode in O'Shea's shaft is small, and the ground ...rd for sinking. Judd's shaft is worth 1½ ton per fathom; the lode is of a very pro...ising character. El Clavel sump-winze is worth 2 tons per fathom; the lode is still ...ry strong, chiefly composed of carbonate of lime, quartz, and lead. Suez's winze is ...orth 1½ ton per fathom; the lode is compact and regular. Lerida's winze is worth ...ton per fathom; the lode is very wide, composed of soft granite and sundry small ...anches of lead.—Los Salidos Mine: The driving of the 5th level, east of Antonio's ...winze, is resumed; the cross-course is strong, and has thrown the lode north some dis...nce. The 5th level, west of Fernandez winze, is worth 1 ton per fathom; the lode is ...a most promising character. The 4th level, west of Salvador's winze, is worth ...ton per fathom; the lode is fast improving. The lode in the same level, east of ...alias winze, is spotted with lead, and indicates speedy improvement. The 4th level, ...est of San Pablo's shaft, is worth ⅛ ton per fm.; the branches are very small in this level. The same level east is also worth ⅛ ton per fm.; the lode has somewhat declined in value since our last report. The lode in the 3d level, east of Munos winze is small and poor. The 3d level, west of Buenos Amigos shaft, is worth 2½ tons per fm.; the lode is compact and firm, opening splendid tribute ground. There is nothing new in the 1st level, east of San Miguel shaft, worthy of notice.—Shafts and Winzes: Morris's engine-shaft is worth 4 tons per fathom; the lode is of a very powerful and productive character. San Gabriel shaft is holed to the 5th level. Gea's winze is worth ¾ ton per fathom; the lode is small, and rather hard for sinking. Lopez winze is worth 1 ton per fathom; there is nothing new in this winze to notice. Oribe's winze is worth 1 ton per fm.; this winze is situated some 12 fms. west of Buenos Amigos shaft, and was commenced in old workings—*i.e.*, a large sink or winze 9 varas deep; at this point the lode has made a complete set off, and is consequently small, which, with the enormous quantity of water they (old workers) must have had, caused its abandonment. There is a good lode in the eastern end, where there is but little done. In the westernd of sink the lode is rich, and worked away irregularly for about 4 varas in length.

UNITED MEXICAN.—Guanaxuato, Dec. 23: Mine of Jesus Maria y Jose: I have the satisfaction to continue to report favourably of this mine. A good deal of ore is in sight, the last new works are very good, and the general indications bespeak a continuance in the yield of a considerable amount of ore, though the ley, rich in some parts, is generally lower than in the early portion of the year. The decrease in the ley of the ore will, to some extent, be compensated in the coming year by the saving in the cost of reduction from an abundant harvest. The chief new features since my last report are, that in the frente of San Pantaleon (that most advenced) a cross-cut to the alto has discovered fair ore about 2 varas wide, the vein being about 18 varas broad; also the new and highest frents of San Andres has proved, as was expected, very good, having a fair breadth of ore, some very rich. I enclose Mr. Furber's report, which contains further particulars. In four weeks the mine sales have produced $14,327, the busconee $5465, half the latter on the mine account: 7025 cargas have been extracted by the regular miners, of which 1565 cargas have been sold, and 5273 cargas sent to the haciendas for reduction. The profit on the month of November was $19,872. The repairs of the old shaft have been commenced, and are progressing rapidly. A second-hand malacate in good order, and at one-third the cost of a new one, has been purchased, and will shortly be put up, and when the whole is complete, and the shaft has been cleared of an accumulation of rubbish, the raising the ore from the new works will be greatly facilitated. From the low price of forage which may be anticipated, next year promises to be favourable for haciendas de beneficio, and I have just made an arrangement for the employment of another hacienda (containing 20 arrastres) in the reduction of ore from Jesus Maria on the company's account.—La Trinidad: During the month 22 varas have been driven along the vein and towards the works in Jesus Maria, but only a few indications of ore have been met with.—Remittance: A conducta is still talked of as to start early in January for the west coast, but I am unable yet to decide whether to remit funds for England or not. My present impression is that the risk will be too great, but a few days may bring important intelligence respecting foreign intervention. On the chance of my sending money it may be desirable that an open policy of insurance for $35,000 be effected

WEST CANADA.—W. Plummer, Dec. 16: Copper Bay Mine: The new engine-shaft was deepened 7 feet for the month. The ground continues to be very slow for sinking; the lode is of its usual width and productiveness. The level going west of Palmer's fire lode yields 3 tons to the fathom or upwards. The lode has much improved of late, but is very slow for cutting. The levels to the east and west of Bray's shaft, at the 20, are yielding a fair quantity of ore (3 tons) to the fathom. The stope to the west of Jennings's is turning out as usual from 3 to 4 tons to the fathom.—Wellington Mine: The 20, to the west of Crase's, yields 3 to 4 tons to the fathom, and is looking promising. The cross-cut of this shaft is still in the lode. We informed you in our last that we considered we had reached the lode. We have continued ever since, and have not yet got through it. We have broken some good stones of ore, but, upon the whole, the lode is so far poor. We are daily hoping to meet with something better. The lode in Michell's shaft has much improved, but is slow for sinking. The stope to the east of Hooper's has yielded well during the past three months, and has added a great deal to our Wellington supplies. The other stopes are without any change worthy of remark. The lode in the level going west of Collings's fire lode has become much wider, and will yield more ore per fathom, now fully 3 tons. In dressing you will find that we have put to pile for the month 214 tons of ore, whilst we raised from both locations 220 tons. This amount was rather beyond the average.

TRUTH'S ECHOES; OR SAYINGS AND DOINGS IN MINING.

The Mining Share Market has been very animated during the whole week, and a considerable amount of business has apparently been transacted. Great activity has prevailed, in consequence of several improvements having been reported, and shares of such mines have been in good demand. The usual "account day" for the settlement of shares transacted during the past fortnight took place yesterday; the customary excitement took place, arising from the non-delivery of shares in time for early settlements. EAST CARADON, EAST CARN BREA, NORTH DOWNS, and WHEAL GRYLLS shares were among the scarce stocks.——DEVON GREAT CONSOLS shares have been in request, but found rather scarce.——WHEAL BASSET, SOUTH FRANCES, and COPPER HILL shares have been in fair demand, and few shares changed hands.——NORTH BASSET has had a fair share of the business of the week at advanced prices, in consequence of a reported improvement.——SETON and WEST SETON shares are sought for at firmer prices.——EAST BASSET shares have been dealt in.——COOK'S KITCHEN, TINCROFT, and a few other shares are still in request at present rates.——In EAST CARN BREA shares there have been daily operations, attended with fluctuating prices; still a large number have changed hands.——NORTH TRESKERBY shares have been rather freely dealt in at higher rates, in consequence of an improvement in the mine; but a subsequent decline has taken place.——NORTH DOWNS shares suddenly advanced yesterday, from telegrams advising the cutting of the lode at the 60, and rather freely dealt in.——NORTH ROSKEAR and GREAT SOUTH TOLGUS shares have improved, and a good demand exists—the latter in consequence of an improvement.——CARN CAMBORNE, RETALLACK, and EAST BUDNICK AND MOUNT shares have changed hands at nominal prices.——EAST CARADON shares have, as usual, been in request daily, with the usual fluctuations.——SOUTH CARADON shares have also been in demand at market prices.——MARKE VALLEY and WEST CARADON shares have slightly declined.——WEST ROSE DOWN and HERODSFOOT shares have been in good request.——LUDCOTT and MARY ANN shares have been dealt in at former rates.——TRELAWNY shares in good demand at higher prices.——HINGSTON DOWN and EAST DEVON shares have changed hands at former prices.——WHEAL ARTHUR shares have been firm at present rates, and still in request.——EDWARD shares have been done at minimum prices.——TAMAR CONSOLS and EAST RUSSELL shares have slightly declined.——SORTRIDGE shares find buyers at lower quotations.——NORTH WHEAL ROBERT shares have been in fair request.——NORTH MINERA, DALE, and RIBDEN shares have changed hands at present prices.——There has been a good enquiry for shares in the following tin mines:—WENDRON CONSOLS, GREAT FORTUNE, and WHEAL UNY, at market prices, and several bargains effected.——ROSEWALL HILL and RANSOM UNITED have been in good request at improved rates.——PROVIDENCE and WHEAL MARGARET, KITTY (Leiant), and TRENCROM have also been sought for at higher prices.——WHEAL GRYLLS and UNITY have also found buyers at present rates.

At EAST CARADON, the caunter lode continues to look remarkably well; the 50 east is valued at 85*l.* per fm., and the 60 east at 45*l.* per fm. The rise in back of the 60 west is communicated to the 50, and gone through a fine course of ore. Fawcett's lode, in the 60 east, is worth 12*l.* per fathom. The new lode, in the 60, is worth 20*l.* per fm. west, and 10*l.* in the eastern end.

At MARKE VALLEY the prospects are without change; the next sampling is estimated at 410 to 420 tons.——At WEST ROSE DOWN the engine will be started on Monday next. They are progressing with their underground operations very satisfactorily.

NORTH WHEAL ROBERT has improved very considerably, especially in the 42 west, where they have a course of ore worth from 45*l.* to 50*l.* per fm. Should this discovery continue any distance, the future returns will be augmented. The sampling on Thursday is computed at 240 tons.——TAMAR CONSOLS has improved in several important places. In the 237 south they have cut through the end, and found it worth 1½ ton per fathom. The 215 south has also improved, and yielding about 1 ton per fm. In consequence of these and other improvements, the samplings will be augmented.

At GREAT TREGUNE they have a very important discovery in the 80 west, where an excellent course of grey copper ore is coming in. A well-informed and practical agent observes—"I have seen a stone that came from this end, and I have not any doubt but it will produce 50 per cent. for copper." Should this continue, it will prove highly gratifying to the adventurers, who have zealously pursued the operations against almost overpowering obstacles and difficulties. By letters received to-day (Friday) the lode in the 80 west is disordered in the end by a branch running across; the lode is 3½ ft. wide, with a good leader, 1 foot wide. Other places without any material change.

EAST WHEAL JANE is reported to hold out very considerable indications of great promise; they have gone through a lode of excellent orey ground for 35 fathoms, and the present end is large and orey throughout. They have an excellent pile of lead at surface, 12 tons of which are ready, or nearly so, for sale.——At WHEAL POLMEAR it is stated that they have made a very good discovery in the 15 east, where they have a good course of ore; and in the 30 cross-cut they have an excellent lode. They sampled yesterday 220 tons, and calculate on sampling next month 130 tons at least.——NORTH TRESKERBY: During the early part of the week the report stated that the lode in the shaft continued worth 60*l.* per fathom; but a rumour has been current that it had fallen off, but whether this be an effort to depress the shares requires confirmation. Still it is officially stated that a pare of men has taken a bargain to raise 50 tons in a fortnight at 5*s.* in 1*l.*, and 50 tons at 1*s.* 9*d.* in 1*l.* for the next fortnight. The coming sale is not expected to realise a large amount from the quality of the ore, but the following will be augmented by a large proportion of higher produce ore. From a report received to-day (Friday) the lode in the shaft has been disordered by a branch of spar, but there is every appearance of its going off.——At NORTH DOWNS they have intersected the lode at the 60, and found to carry good stones of ore; but the influx of water has precluded any further operations. The levels above have been drained and two winzes set, where the lode is worth together 100*l.* per fathom. The water will be drained by Monday, when more will be seen of the lode in the bottom.

WHEAL SETON is looking remarkably well, and the recent improvement fully maintained. The lode in the 140 east is yielding 12 tons per fm., and the same level west from 4 to 5 tons. The 140 end east is worth 7 tons, and west, on the new south lode, 6 tons per fm. About three months since they were obliged to suspend the winze in bottom of the 130, in consequence of the influx of water, which they have now drained, and resumed sinking on a lode worth from 100*l.* to 120*l.* per fm. (for the length of the winze). This level is several fathoms in advance of the 140.

At WHEAL GRYLLS the engine-shaft is down 6 fms. under the 20, on Fisher's lode, where the lode is 3 ft. wide, worth 25*l.* per fm. In the 20 east the lode is worth 5*l.* per fathom. The western end of the flat-rod shaft is improved, and valued at 12*l.* per fm.; the winze in the bottom is worth 15*l.*, and another winze, west of Gryll's shaft, is valued at 12*l.* Stope in back of the adit is worth 10*l.* There are two stopes in back of the adit, on Georgia lode, of the average value of 15*l.* per fathom. Their last sale of tin realised 711*l.* 19*s.* 4*d.*

JAMES LANE.

STANBURY COAL, IRON, AND LEAD MINING COMPANY.—A case of some interest to adventurers in limited liability companies was heard at the Bradford County Court, on Jan. 24; the company bringing an action against an adventurer for arrears of call. The company was first started by Mr. Fawcett, an auctioneer and broker in Bradford, who would not swear that every person in the room at the preliminary meeting, for which he issued the invitations, was not inserted in the list of directors. The lessees of the property were Messrs. Fawcett, Heaton, Rowbottom, and Gledhill, the latter of whom was appointed on the direction, though he had only applied for 500 shares, not one of which he had taken up or paid for. There are nine directors at present—Messrs. Fawcett; Rowbottom; Woodhead, coal owner and quarryman; Emsley, a mechanic employed by some dyers (Mr. Fawcett did not think he was a stoker); Baldwin, spinning overlooker; John Speight, overlooker of one room in same factory; Anthony Proctor, a grocer; Henry Briggs, a tailor; and Abraham Dracup a milkman. Mr. Fawcett had not paid the two last calls. Mr. Gledhill withdrew because he could not get 200 shares. They never had a banker, always spending the money as they got it. The directors have received 500*l.* or 600*l.*, but they had never any in hand to account with at the bankers. Mr. Robert Smith Hird, the secretary, a house painter and decorator, had posted a great portion of the call letters into the Horton district, but did not know that he addressed one personally to the defendant. A nonsuit was asked for on behalf of the defendant, and granted with costs; the judge remarking that, quite irrespective of the particular issue that day, he thought he never in his life heard of such management; it was a mere system to put money into the pockets of particular persons interested in the company.

Mining Correspondence.

BRITISH MINES.

ABERDOVEY.—A. Ede: We have intersected the lode in the cross-cut at the 42, but as we have not driven more than 1 ft. into it cannot yet give full particulars. The stope in the back of the 32, on main lode, is producing 1¼ ton of ore per fm., and that in the 22, near the engine-shaft, is producing 1 ton per fm. We have four men sinking a winze in the 32 on the lode. The dressing is going on favourably.

BEDFORD UNITED.—J. Phillips, Jan. 28: In the past week we have intersected the lode east of the cross-course in the 50; it is 18 inches wide, composed of spar, mundic, and stones of ore. The stopes and ends in other parts of the mine continue to yield as last reported.

BOTTLE HILL.—J. Eddy, Jan. 29: South Lode: We have cleared a cross-cut to this lode upwards of 40 fms., and on its course about 30 fms., timbered and secured the level to shaft, cut plat, and now in course to sink the shaft. We shall set a bargain to-morrow to six men, to sink this shaft 10 fms. below the adit level; judging from the ground now in the bottom of the shaft, I think this work may be completed in about three months; the cost in doing it, say, from 70*l.* to 80*l.* I cannot tell the value of the lode at the bottom of the shaft for the present, after sinking a fathom or two I shall be able to say more about it, and put a value on it per fathom. This I can say, it is a good lode, and if it continues as it now is after the shaft is down, we shall be able to make good profits on this lode. There will be a great quantity of stuff coming away from this part of the mine in two or three months from this time for the stamps, and I just notice, that we have a fall for another wheel 26 ft. in diameter; this would work 12 heads of stamps, which could be brought very near the shaft, and enable us to put all tinstuff to stamps with very little expense, and would cut of all horsework, which comes very heavy. We have some material on the mine which would assist in carrying out this work. I think a second-hand wheel might be purchased at a low rate; if so, the wheel-pit might be cleared out and built, leats cut, and 12 heads of stamps set to work, for about 150*l.* I should like to carry out the working on this lode with spirit for the next six months, after which good returns may be expected from this part of the mine. All the tribute pitches in the other part of the mine are without alteration. You shall hear more about the south lode in the course of a week, and I am quite ready to meet anyone you may send to inspect the mine.

BORRODALE.—W. Dixon, Jan. 30: The rise from Walton's stage continues favourably. We have met with one bunch of first quality wadd this week, and a few pounds of inferior quality. The course of the wadd is more northerly, with an inclination of about 45°, and the men are progressing a little better. The contract this month is 9*l.* 9*s.* per fm. We have obtained 2 cwts. of inferior wadd from William's pipe.

BULLER AND BASSET UNITED.—W. Pascoe, S. S. Bice, Jan. 29: The 100 west is set at 5*l.* per fm. The 80 west is set at 5*l.* 15*s.* per fm. We have commenced driving the cross-cut at the 80, to intersect the south parallel copper lode, at 6*l.* per fm. The 60 west is set at 5*l.* per fm. The prospects throughout the mine are now fully as good as when referred to in our report of Jan. 18.

CALSTOCK CONSOLS.—W. B. Coliom, Jan. 30: The lode in the bottom of the engine-shaft is 2 ft. wide, composed of prian and flookan, with fluor-spar and copper ore; the lode is also going down more perpendicular. In the 48 fm. level east the lode is 3 ft. wide, yielding 1 ton of ore per fm.; worth 4*l.* 10*s.* per fm. The two stopes in the back of the level will yield 1¼ ton and 2 tons of ore per fm.; averaging 7*l.* 10*s.* per fm. In the 48 fm. level west the lode is small. In the 12 fm. level west, and rise in back the same on the caunter, the lode will yield about 1 ton of ore per fm.; worth 5*l.* per fm. In the tribute department there is no alteration, with the exception of the pitch in the back of the adit, now let to four men, at 10*s.* in 1*l.*

CAMBORNE CONSOLS.—W. Roberts, Jan. 28: We shall sample to-morrow (computed) 11 tons of ore. In the 50 east the lode continues 1 ft. wide, and produces occasional stones of ore.

CARADON CONSOLS.—W. Rich, Jan. 28: We have commenced driving on the caunter lode, east of the cross-course, at the 68 fm. level; this caunter and the engine lode are separated by a horse of granite, but I think it will wear out, and the lodes unite as soon as we leave the influence of the cross-course. We are making every effort to open out at the bottom of the mine as speedily as possible, and, although a fortnight only has elapsed since we finished casing and dividing the shaft, we have cleared the mine of attle, and have driven about 6 fms. in the cross-cuts, besides partly cutting plat and opening a little way on the course of the lode. The Menadue lode, in the 54 west, is 2 ft. wide; although we cannot report any great improvement, yet still the bearing of the lode, and its general kindly character is all that can be described short of a course of ore. The Menadue lode, going east, during the past week has been disordered by a large vugh; it is now getting more compact, and again carries good stones of ore.

CARDIGAN CONSOLS.—J. Sanders, Jan. 24: The 20 west, at Bog shaft, is at present very hard and poor, with a great quantity of water coming out of the lode, by which I think some change will take place very soon. The 10 east is much the same as for some time past; the lode is of a very promising character, with mundic, and a little copper ore occasionally, but not to value. The adit east, on copper lode, is still yielding some good copper ore, worth about ½ ton per fm., and likely to improve; I intend to erect a horse-whim to draw the stuff from this place as soon as circumstances will admit, after which a pare of men will be put to stope the back of the level, where the lode at present is looking very good, and likely to turn out a good heap of ore. In the deep adit west, at quarry shaft, the hard part of lode appears to be thrown out of its direction by a soft channel of ground from the south side of the level; I intend to drive west a few fathoms further, and if the lode is not met with again in that direction a cross-cut will be driven to find it. In the adit driving west, in the old mine, the part of the lode now being driven on is poor, consequently a cross-cut will be driven across the lode very shortly to prove it. At the western trial shaft nothing has been done for the week in consequence of the weather, which has been so severe that everything has been blocked up with ice. If we can get a little fine weather, I hope to have the wheel ready next week.

CARMARTHEN UNITED.—R. Sanders, Jan. 27: During the past month the following work has been done:—The engine-shaft sunk 4 fms. 4 ft., which is now down the required depth for a 54; in the last 3 fms. of sinking the portion of the lode carried in the shaft has been poor, having been disordered by a slide; there is still a portion of the lode standing against the footwall, which will be proved by cutting the plat. It will take us about three weeks to put in the necessary timber in the shaft, and cut the plat, when we shall commence to drive the 54 north by a full pare of men. The 42 has been driven north 2 fms.; in the last 6 ft. of driving the lode has improved, producing saving work for lead, and is still improving; the water is issuing strongly from the lode, which I consider to be a favourable indication that we have the commencement of a fresh shoot of ore. The 32 north, on the caunter, has been driven 3 fms.; this end is also improved in appearance—less flookan, more killas, lode getting wet, and showing fine grain lead in the greater part of the joint of the lode. We have stoped 6½ fms. in back of the 42 We have stoped 3 fms. in bottom of the 22; we have also had four men on tribute; two at 4*l.* 10*s.* per ton, and two at 7*l.* per ton. Saturday last being our pay and setting-day, the following bargains were set:—The 42 to drive north, to two men (and to put four or six men if necessary), 2 fms., at 5*l.* 5*s.* per fm. The 32 to drive north on the caunter, to two men, 2 fms., at 50*s.* per fm.; To stope the back of the 42, to four men, for the month, at 55*s.* per fm; lode producing 18 cwts. per fm. To stope the bottom of the 22, to two men, for the month, at 55*s.* per fm.; lode producing 13 cwts. per fathom. A pitch in back of the 32, to two men, for two months, at 5*l.* 5*s.* per ton. A pitch in back of the same level, to two men, for two months, at 7*l.* per ton. The nine men in the shaft will go on as formerly on their lump bargain, which I hope they will complete in about three weeks. We shall sample on Saturday next (computed) 25 tons of good quality lead ore.

CARN VIVIAN.—J. Polglase, W. Eustice, Jan. 29: The lode in the 53 west is 8 ft. wide, producing on the north part jack, mundic, and good stones of copper; on the footwall is a good lode of tin; we have driven over this bunch of tin 12 fms. The 64 fm. level end west is about 12 fms. behind the tin ground in the level above, and from present appearances we expect to have tin here also shortly.

CLARA UNITED.—J. Lester, Jan. 30: There is no alteration in the character of the lode in the 32 east, nor in the stopes over that level. The lode in the 20, going towards the boundary shaft, is still letting out a great deal of water, but, as yet, the quantity in the shaft is not materially reduced. We have now favourable weather for surface and dressing operations.

CUDDRA.—F. Puckey, E. Dunstan, Jan. 30: There has been no lode taken down in the 100, west of Tickell's shaft, since last reported; in the rise in back of this level the lode is 1 ft. wide, worth 3 cwts. of tin per 100 sacks. The lode at Walker's shaft is at present disordered by a perpendicular iron branch; it is 6 ft. wide, and will yield 3 cwts. of tin per 100 sacks. In the winze sinking below the 60, west of the same shaft, the lode is 2 ft. wide, and will yield 2 cwts. of tin per 100 sacks. The lode in the stope in back of the 60, west of Walker's shaft, is 2 ft. wide, worth 2 cwts. of tin per 100 sacks; the different stopes, east of the same shaft, and in the back of the same level, are still producing work of a low quality.

DEEP LEVEL.—Wm. T. Harris: The ground in Lankshear's level is a little easier for driving, and still lets out water; this we consider a good indication that the lode is near.

DEVON AND CORNWALL UNITED.—T. Neill, Jan. 28: We shall take down the lode in the deep adit end this week.—William and Mary: The lode in the 12 west is improved, now worth 2 tons of ore per fathom, and likely to further improve. The lode in the 10, east of the engine-shaft, is looking very promising, and worth 3 tons of ore per fathom.

DEVON NEW COPPER. P. Hawke, Jan. 29: The stopes in the back of the 78 yield some rich yellow and peacock copper ore; the latter is embedded in red gossan and decomposed mundic as fine as sand. The cross-cut into the great north lode, both to the east and west of shaft, is without any change to report. We are fixing a new plunger-lift at the 88, during which it will not be possible to continue the sinking of the shaft.

DULTA.—J. Martyn, Jan. 29: We have commenced sinking a new engine-shaft, about 100 fms. further east on the junction of Dyer's, Butt's, and the new lode, and close on the junction of the killas. The men have offered to take the shaft at 1*l.* per fm., and 13*s.* 4*d.* in 1*l.* for tin. Our engine is now at the St. Austell station, and will be on the mine in a few days. We have plenty of capital stone for building the engine-house, boiler-house, and stack, and so soon as this is completed we can put on more stamp-heads. Dyer's lode is about 11 ft. wide, all carrying tin. Butt's lode is improving, and has yielded some stones of almost solid ore; and I have no doubt of having a good bunch of tin when this lode crosses the new lode We are getting on with the dressing-floors, but the weather has been much against surface work.

DYFNGWM.—E. Davies, Jan. 28: We are going on well with the dressing again. The ice cleared away from our floors on Saturday; this week is fine and open. No change anywhere underground. The bad weather prevented our getting the ore down by the boats. The first spring tide we shall finish loading the *Morriston*, and get off another cargo as quick as possible, we expect by the same tide.

EAGLEBROOK.—H. Tyack, Jan. 29: We have had a favourable change in the weather, and all our underground men resumed their bargains on Monday last. In driving the 20, west of the engine-shaft, the lode in the present end is about 3 feet wide, composed of dark blue slate, soft spar, blende, and lead ore, producing about 8 cwts. of the latter per fathom, and looking promising for improvement. In driving the 30, west of the engine-shaft, the lode is from 6 to 7 feet wide, filled with white spar, carbonate of lime, hard clay-slate, strong spots of copper, and occasional stones of solid lead; the lode is letting out much water. In the 30, east of the engine-shaft, the lode is about 4 feet wide, composed chiefly of porphyry and white spar, with spots of copper.

EAST CARN BREA.—T. Glanville, J. Scholar, Jan. 29: In the 50 west the lode is 2½ feet wide, yielding 4 tons of ore per fm. In the 40 east (29 fms. behind the winze sinking below the 26) the lode will produce 4 tons of ore per fm. In the winze below the 26 the lode will produce 4 tons of ore per fm. In the 26 east the lode will produce 2 tons of ore per fm. In the winze below the 40 the lode will produce 1 ton of ore per fm. In the winze below the 30 the lode will produce 1 ton of ore per fm. Nothing new in the other parts of the mine.

EAST DEVON GREAT CONSOLS.—Thos. Richards, Jan. 29: The engine-shaft is sunk about 5 fathoms below the 52 in good ground for progress. In the 52 west the lode is large, and of a promising character, composed of spar, prian, and mundic. The lode in the south cross-cut, in the 40, is 2 feet wide, producing spots of

about 1½ ton. We have now driven about 35 fms. through a continues course of lead, which has produced on an average over 1 ton per fm. We have commenced stoping about 20 fms. behind the end, where we have about 40 fms. backs, and the lode is from 2 to 6 ft. wide, producing 1 ton of lead per fm.—Middle Lode: We have driven an adit on the course of this lode about 5 fms., and find it to be about 3 ft. wide, composed of splendid gossan, carbonate of iron, flookan, prian, &c., and a little mundic, and presents such appearances as can hardly fail to produce large quantities of lead at a reasonable depth.—Engine Lode: An adit is driven on the course of this lode by the old workers for a considerable distance, it varies in size from 1 to 8 feet, and is composed of gossan of a very beautiful character, carbonate of iron, mundic, and fine stones of lead and silver ores. The engine-shaft is sunk on it course about 12 fathoms below the adit, at the bottom of which it is reported by the former workers that the lode is about 6 ft. wide, producing good work for lead, but nothing can be seen of this until the engine is got to work, which will be about the end of March. We commenced our dressing operations about a month since, and have already sampled (computed) 11 tons of crop lead ore, and are preparing for another sampling, and hope to get from 12 to 15 tons more ready for sale by the end of next month.

EAST ROSEWARNE.—J. James, Jan. 25: There is but little done in the 55 east since last reported. The men are rising against Hallett's shaft to effect a communication with the 43 as soon as possible, as there is not sufficient air to work both places; the lode has not been taken down in the rise, but is apparently good. In the 55 west the lode is 18 in. wide, producing good stones of ore; we hope shortly to get through the old eivans, when we may expect a more productive lode. In the stope below the 43 west the lode is 1 ft. wide, worth 23*l.* per fm. There is no change to notice in the 43 fathom level cross-cut. We are casing and dividing Hallett's shaft with all possible dispatch. The tribute department is much as for some months past.

EAST WHEAL GRENVILLE.—G. R. Odgers, W. Bennetts, Jan. 29: The lode in the 45, east of the shaft, is from 2 to 2½ ft. wide, of quartz, peach, and prian, with tin and copper, worth from 7*l.* to 8*l.* per fm.; here we are expecting a greater improvement, judging from the level above. The lode in the 45 west is from 3 to 4 ft. wide, of quartz, peach, and prian, with good ore and tin, worth 10*l.* per fm.; this is a strong and masterly lode. At the 35 east the lode is very large, probably from 3 to 4 ft. of gossan, quartz, peach, and prian, with ore and tin; it is not yet clear of the cross-course, therefore unsettled. The lode in the rise above the 35 west is 20 in. wide, of gossan, quartz, and ore, worth about 1 ton to the fm.; this is opening good tribute ground. The stope above the 35 west is worth for ore and tin 5*l.* per fm. The lode in the 25 east is nearly 18 in. wide, of quartz, peach, and gossan, with good stones of tin—a kindly lode.

EAST WHEAL MARTHA.—J. Richards, Jan. 29: The lode is large, and very promising, composed of capel, mundic, and good spots of copper ore.

EAST WHEAL RUSSELL.—J. Goldsworthy, Jan. 29: Homersham's shaftmen are engaged in taking down a piece of ground left in the eastern end of the shaft, below the 110, to bring down the ship-road to the 120. In the 110 east the part of the lode being carried is 4 feet wide, composed of capel and quartz, 2 feet being a very fine gossan. Fuewin's cross-cut, in the 110, has been extended north 2 fms. 3 ft., which has intersected three small branches of capel and quartz. In the rise in back of the 100, east of Oats's No. 2 winze, the lode is poor. The rise in back of the 100, on the north part of the lode, east of Davis's cross-cut, is poor. In the rise in back of the 100, on the north part of the lode, west of Davis's cross-cut, the lode is worth 12*l.* per fm. The stope in back of the 100, west of Oats's No. 2 winze, is worth 10*l.* per fm. In the 88 east the lode is 2 ft. wide, composed of quartz, prian, and mundic, with a little yellow copper ore—promising. In the 66 east the lode has been large, of a very kindly appearance. The clearing of the 45, east of the Tunnel level, is progressing favourably. In the 88, west of Hitchins's shaft, the part of the lode being carried is 3 ft. wide, composed of quartz, prian, mundic, and a little black oxide of copper ore—a kindly lode.

— J. Richards, Jan. 30: Homersham's Shaft: Nothing at present is being done in the 120, the men being engaged taking down ground just below the 110 left as a security, or penthouse, whilst sinking, and also bringing down the guides, or skip-road, to the bottom level. In the 110 east the part of the lode being carried is 4 ft. wide, consisting of capel, quartz, prian, and very fine gossan. In Frewin's cross-cut north, in the 110 east, three branches have been met with, composed chiefly of quartz. In the rise in back of the 100 east, and east of Oats's No. 2 winze, on the south part of the lode, the lode is unproductive. In the rise in back of the 100 east, on the north part of the lode, west of Davis's cross-cut, the lode is 2 ft. wide, worth 12*l.* per fathom. The lode in the stope in back of the 100, west of Oats's No. 2 winze, is worth 12*l.* per fm. In the 88 east the lode is from 2 to 3 ft. wide, composed of quartz and mundic, with good stones of ore, and is promising. In the 66 east the lode is large—5 ft. wide, and is looking healthy. The clearing and securing the Tunnel level is progressing satisfactorily. In the 88, west of Hitchins's shaft, 3 ft. of the lode is being carried, consisting of mundic, prian, quartz, and black oxide of copper.

GAWTON.—G. Rowe, Jan. 25: We have not yet reached the south lode in the cross-cut at the 36. The tribute pitches throughout the mine are improved. At the 50 we have one working at 6*s.* 8*d.* in 1*l.*; at the 36 one working at 10*s.* in 1*l.*; and above this level two working at 13*s.* 4*d.* in 1*l.* tribute; the men are getting fair wages. In the mean time we are using our best energies to clear and secure the runs in the 50, and ventilate the workings in the western points.

GREAT BRIGAN.—T. Trelease, Jan. 25: We have now dropped below the deep adit level 28 fms.; before the last drop we discovered the back of the 22, and are now draining the same; I hope to fork by the early part of next week, so that we may examine it. We are now clearing the 12 fm. level cross-cut from the engine whim-shaft south to the engine-shaft, and shall clear this level east and west as soon as possible; these levels are full of stuff, and will take some little time to clear. We are also clearing this level east and west of Shop shaft, on the course of the lode, but find most of the lode taken away above this level, as far as yet seen. We are also clearing a whim-shaft below the deep adit level, about 76 fms. east of the engine-shaft. There is not any alteration to notice on the north lode in the deep adit level for the past week.

GREAT CARADON.—F. C. Harpur, Jan. 25: The sinking of the engine-shaft below the 40 is progressing very favourably; we are now down nearly 8 fms. below the above level; the ground is of a congenial character, being a light-coloured killas or clay-slate, with branches of quartz, mundic, &c., traversing the same; sinking by nine men.

GREAT DAREN.—W. Williams, Jan. 28: Having inspected this mine to-day, I beg to inform you that in the bottom level nothing has been done to open on the lode under the floor since the 10th (the date of my last report); consequently, no lode can be seen in the bottom. In the back of this level west a tribute pitch is working by two men, at 10*l.* 10*s.* per ton for lead; the lode is large and rather hard, worth about 20*l.* per fm. In the back of this level, east of the shaft, four men are opening a portion of the lode to show its quality. Here there are good stones of lead. In Francis's level there are six men raising through a piece of ground about 15 ft. high to communicate with the same level coming east: this will place them in a position to carry on the 6 ft. stope westward to unwater the western mine at the depth of Jenning's level. Six men are engaged repairing the shaft at and near the surface, which is necessary previous to drawing away the stuff to clear the bottom level. Four men are driving at Tanks's cross-cut to intersect Cwm Symlog lode. Sixteen men are on tribute in different part of the mine, at 10*l.* 10*s.* per ton for lead rendered clean; there are nine surface laborers, two carpenters, two sniths, and two sawyers. At Cwn Daren four men are sinking under the adit, and two are driving a cross-cut, while at West Cwm Symlog there are four men sinking a shaft. You will perceive there are several hands employed, and the cost at present cannot be much less than 200*l.* per month, independent of materials. The returns at present will amount to about 15 tons of lead per fathom; worth 20*l.* per ton. It is more than probable that the crushers will be ready this week. There has been some little delay at the foundry, but now all things are ready. I cannot close this report without impressing upon you the necessity of advising that the system of contract should, as far as possible, be introduced amongst the mines, as the proceedings would be far more satisfactory, and probably a reduction of the surface labouring men would not impede the efficient working of the time.

— Jan. 29: Francis's level has been cleared and secured with good oak timber so far as where it communicates with the 20 fathom level from the old mine. The workmen will either have now to rise in whole ground from the end of Francis's level up to the 20 (which is 15 ft. above), or to clear and timber the ground run in through the pass; it at present appears more feasible to rise, as it will try the lode as well as aid in unwatering the old mine to the 20. When that object is secured it is confidently expected that much profitable tribute ground will be laid open, as well as a great quantity of old orestuff, that will leave considerable profits on dressing. The water is now drained to the bottom of the eastern mine, Daren Fach, where there is a good course of ore in the back of the level (the 10), which is set at 10*l.* per ton, to raise and make fit for market. There are five other bargains in the mine, let on similar terms, and the ore ground in all of them looks exceedingly well, and demonstrates that the predictions have been well made that have originated the expectation of this again soon becoming a great and very valuable silver-lead mine.

GREAT NORTH DOWNS.—T. Trelease, Jan. 25: We are now in fork 9 feet below the 20, which is deep enough for bearers and cistern for our standing lift; we shall commence cutting ground for the purpose on Monday next. We find at the engine-shaft, in the 20, a cross-cut extended south upwards of 100 fms.; there are several lodes intersected in this driving, four of which are opened on both east and west. We find these levels almost full of rubbish, and hope to give you more particulars of the extent and the ground taken away on the lodes in the next report. The pitches sett are producing some tin and copper ore, and most of the men getting fair wages.

— T. Trelease, Jan. 29: I beg to inform you that since we commenced operations here we have drained the mine 9 feet below the 20, and are now engaged in cutting ground for bearers and cistern, to fix the standing-lift at the 20, which we calculate will take about a fortnight from this time to complete, and shall soon after this get the drop-lift in order, so as to begin draining for the 30. With regard to clearing the shaft, we have commenced to clear Lord's east shaft below the 10, also Lemon's from the shallow adit, Job's shaft below the 10, and Moorcom's shaft below the deep adit level, Rule's shaft, south of the engine, being collared up, and to clear to the deep adit. We also purpose clearing Pendarves' shaft as soon as we can get ready to do so. We consider all these shafts should be cleared and secured as the water goes down, they being the principal working shafts on the different lodes. We are also clearing and securing the Old Treskerby adit level, by six men, this adit being out of repair and the old mine full of water; and have no doubt, when this adit is cleared and the water taken up, it will lessen the water considerably in both this mine and Great Wheal Busy. We have set six pitches, east and west of Lord's east shaft, in the back and bottom of the 10, at 13*s.* 4*d.* in 1*l.* We have also set one pitch, west of Job's shaft, in the back of the 10, at the same tribute, and hope, soon after clearing the 20, to get a good number of tributers there; but we find most of the old levels on the various lodes almost filled with rubbish, and find a quantity of ground on the different lodes taken away by the tributers in the former workings, which certainly shows that there must be a large quantity of copper ore and tin taken away from these places. Our steam-whim is almost in working order, and we shall commence to draw from the different shafts as soon as possible. The stand for the new steam capstan will be completed in about a week from this time, and we shall then commence putting up the bastings at once. When this is completed it will facilitate the forking to a considerable extent, as we find capstaning with men to be a very spare and expensive operation. Up to this time we have been draining with two 18-in. lifts abreast, but we now purpose doing so with one, and hope to go on with satisfaction to ourselves and the adventurers.

GREAT RETALLACK.—W. H. Reynolds, Jan. 29: The part of the lode at the shaft is 2 ft. wide, made up of flookan and spar, with spots of mundic, copper, and lead. We hope to reach the 55 in another month.

GREAT SOUTH TOLGUS.—J. Daw, Jan. 29: The lode in Lyle's shaft is still producing very good tinstuff, worth 20*l.* per fm. The lode in the 112, west of Lyle's shaft, has very much improved in the last few days; it is 2 ft. wide, producing 3 tons of copper ore per fm., and likely to further improve. We are driving north on a cross-course at the 100, east of new shaft; it is 1 foot wide, and producing good stones of copper ore. Other parts of the mine are much the same as last reported. We have sampled to-day 198 tons of copper ore.

GREAT WHEAL ALFRED.—Wm. Bugelhole, J. Delbridge, Jan. 29: The lode in No. 1 stope, in back of the 210, is worth 16*l.* per fm.; No. 2 is worth 14*l.* per fm.; and No. 3 is worth 12*l.* per fm. The south part of the lode stripping down in the 190, west of Copper-house shaft, is worth 17*l.* per fm. There is no change in the 160 fm. level cross-cut south since we wrote you last. We sampled yesterday 601 tons of average quality copper ore.

GREAT WHEAL BUSY UNITED.—J. Delbridge, J. Petherick, J. Bryant, Jan. 25: In the engine-shaft the lode is 20 in. to 2 ft. wide—good tinny lode. In the 120, Offord's, there is a good lode of ore. In the 110 there is a good lode of ore and tin. In the 100, the lode is yielding 15 to 18 tons per fm. In the 90, the lode is tinny and 4 ft. wide. In the 70, the lode is 7 ft. wide, with but little tin. The 50 is poor. In the 100 west, the lode is disordered. In the 90, there is stamping stuff of low price. In the 80, there is no lode as yet. In the 70, there is no lode as yet. Nos. 1 and 2 winzes, in the 100 to the 110, yield 10 to 12 tons per fm.; in Wasley's, in the 100, 15 tons per fm. In the 100 stope, 12 tons per fm. In Livett's winze, 18 tons per fm. In Kitelee's winze, 14 tons per fm., with a large quantity of tinstuff. Matthew's shaft yields 14 tons per fm., daily improving. At Boscawen's we are draining and clearing up the shafts with all speed.

— J. Delbridge, J. Petherick, J. Bryant, Jan. 29: The lode in the shaft is 18 in. wide, yielding fine work for tin. We have cut into the lode in the 120, no appearance of any wall. We have a splendid lode for copper; a box of the ore we have sent to the London office; we think this lode will be found standing whole behind the engine-shaft. The quality of the ore being good, the discovery is most important.

HAWKMOOR.—J. Richards, Jan. 28: The stopes in back of the 25 east look well, and will produce 2 tons of copper ore per fm. In Job's rise, in back of the 50 west, the lode is large, and very promising, producing good stones of copper ore. In the 30 west the lode is disordered by a slide.—West Hawkmoor: Fair progress is being made in sinking the winze, which will, in all probability, show an improvement at a deeper point.

HINGSTON DOWN.—T. Richards, Jan. 29: The lode in the 110 west is producing occasional rich stones of ore. The 100 west will yield 2 tons of ore per fathom, and although not producing so much ore as when last reported on, the general character of the lode is exceedingly promising. The rise in the back of this level will produce 8 tons of ore per fm. The 85 west is without material change. The rise in the back of this level will produce about 2 tons of ore per fm. The winze in the bottom of this level will produce 6 tons of ore per fm. The stopes and pitches are, on the whole, yielding fair returns.

HOLMBUSH.—Jan. 30: No lode has been taken down in the 175, east of shaft, since last reported. We have about 3 fms. deaued, and from the appearance we think when taken down it will be found quite equal to the last valuation, then valued at 20*l.* per fathom. We have bored in through the lode in several places. In the winze sinking below the 160, west of the lead lode, the lode is worth about 50*l.* per fm. The 160 west is a little improved, the lode is worth 20*l.* per fm. We have suspended the 145 north on the lead lode for the present, and put the men to rise in back of the level, at 35*s.* per fm., the lode yielding good stones of lead ore. The lode in the 40 flap-jack, east of Wall's shaft, has a better appearance, and giving out more water, we expect a change here shortly. All other places are working much the same as when last reported. We shall weigh off the copper ore to-morrow sold on the 23d inst., and will let you know the weight as soon as possible.

KELLY BRAY.—S. James, Jan. 25: The lode in the 75 east is still 5 ft. wide, 2 ft. of which is producing good work, yielding about 4 tons of ore per fm., worth 4*l.* 10*s.* per ton. The stopes in back of the same level are producing about 2 tons of ore per fm.; the ore appears to be inclining east fast. The lode in the 35 east is 2 ft. wide, poor at present, but the water which is issuing from the end is strongly mineralised with carbonate of copper, showing indications that there is something ahead. The pitches in operation are yielding about the same quantity of ore as for some time past.—Eastern Mine: The lode in the 70 east is large and strong, producing fluor-spar, blende, and a quantity of mundic, and occasionally stones of ore; had the mundic which it is yielding been ore, it would be a good paying lode. The lode in the 60 east is somewhat disordered by a small cross-course, which has been met with in the past week, but the ground is of a favourable character, and there is more water coming from the end.

LADY BERTHA.—Captains Harpur and Wetherell, Jan. 30: The appearance of the lode in the 53 west is without any particular change since our last report, being large, composed of quartz, mundic, and occasional stones of ore. In the 41 east, we have communicated with the winze sunk below the 30, the lode in this end is from 3 to 4 feet wide, consisting of peach, mundic, and a little ore. The lode in the winze sinking below the bottom of the 41 west is large, composed of ore and mundic, worth, for the former 9 tons, or 27*l.* per fm. The lode in the pitch in the back of this level is without any change to notice. The stopes in the back, adjoining this pitch, we have also set on tribute. In the 30 east the lode is from 3 to 4 ft. wide, composed of mundic, quartz, peach, and ore, worth of the latter 2½ tons, or 7*l.* per fm. In the 10 east we have just commenced a rise above the back of the level, where the lode is about 4 ft. wide, composed of mundic, quartz, and ore, worth of the latter 5 tons, or 30*l.* per fm. The tribute department continues to yield well.

LADY ELIZA.—Capt. Evans, Jan. 30: I have let 6 fathoms to drive to cross-cut, at 73*s.* per fathom. I propose sinking a winze on the course of the lode, where there is a course of solid ore going down in the bottom full 6 in. wide. The mine is looking well.

LONG RAKE.—Jan. 28: The 60 fm. level east is getting into hard bearing ground, is improved since last report, and the present value is 15 cwts. per fm. The 60 west has not been driven much yet, as we have been cutting lodge, &c., at this end of the shaft; the lode, however, produces stones of lead, and promises better shortly. The winze sinking below the 48 east is just now in a large bed of spar, which has disordered the lode; we shall get through this in a few days, when, no doubt, the lode will resume its former produce and value. The 48 east is poor; we think to drive this level about 2 fms. further, then rise, as the old level is scarcely 2 fms. over; after this we hope to be able to clear the old level eastward, so as to let the eastern part of the mine. We have three parties on tribute in back of the 48, at 8*l.* per fm.

LLYWERNOG.—M. Barbery, Jan. 29: The weather is again favourable for surface operations, and the masons are now progressing well with the wheel-pit, &c.

MAUDLIN.—Wm. Tregay, Jan. 30: The shaft was set to sink on Monday morning, 3 fms., at 15*l.* per fm. The run in the 50 is set to clear at 20*s.* per fm.; I hope some progress will be made.

MOLLAND.—T. Bennetts, Jan. 28: During the past quarter our operations have been confined principally to sinking the engine-shaft below the 52 fm. level, driving a cross-cut south in the 42, stoping the back of the 42 east on course of the lode, driving the 32 east, and stoping the back of the latter level. The engine-shaft is now down about 5 fms. 2 ft. below the 52 fm. level, 4 fathoms of which have been sunk during the past quarter through a promising lode, varying from 1 to 2 ft. wide, underlying north about 1¼ ft. per fm., composed principally of quarts and yellow copper ore, and produced of the latter from ¼ to 1 ton per fm. for length of the shaft. In the bottom of the shaft the lode is producing much the same quantity of ore, but widening with small orey branches on the south side, associated with a dark blue killas, which I regard as a promising feature, and more especially as no slide has been met with below the 52, and the dip of the country is not near so rapid as in the shaft and levels above. Taking all these features into consideration, I calculate the shaft is well worthy of being sunk to a 62 fm. level, and if the water gets no quicker than at present it can, I believe, be accomplished without putting down a new lift of pumps; the shaft is now sinking by six men, at 17*l.* per fm. A cross-cut has been put out south from the 42 about 7 fathoms, 4½ fms. of which have been driven in the past quarter, in which we met with two or three small branches of little or no importance, and hence it has been suspended; the men are now stoping the back of the 42 east, where we have a large promising lode, composed of white iron, quartz, and yellow and coated copper ore, producing about 1½ ton of said ore per fm.; nearly the whole back of this level will, no doubt, pay for taking away: about 7 fms. have been stoped here in the past quarter, and six men are employed here, at 5*l.* 15*s.* per fm. The 32 east has been extended in the past quarter 3 fms. 4 ft. 6 in.; the lode being poor and the air dead, it has been suspended, and the men put to stope the back of the said level, where the lode produced on an average from 1 ton to 1½ ton of ore per fm., up to a floor of bastard limestone and quartz, which we have just cut: there are several fathoms of good orey ground below the floor, and six men are engaged in taking it away, at 2*l.* 15*s.* per fm., and to rise 1 fm., or through the floor, at 4*l.*, as I have no doubt the lode will be found orey above the floor as well as it has been under it. We discovered a good branch of ore in the side of this level, which has since been taken away: about 26 fms. 4 ft. of ground have been stoped away here in the past quarter. We excavated a little ground in the 20, by driving and stoping, in the past quarter, but which, I believe, requires no comment or notice in this report, as the level was fully commented on in the last quarterly report. The ground excavated throughout the mine in the past quarter is about 48 fms., from which I estimate we have raised 40 tons of ore, besides a few tons of refuse ore. The ore which we now have at surface I estimate at 24 tons, 10 tons dressed and the remainder undressed and in course of dressing. We sold 50 tons of ore an Thursday last for 5*l.* 10*s.* 6*d.* per ton. Should there be no falling off in the stopes in back of the 42 east, and the lode above the floor (in the stopes in back of the 32 east) be found as good as it has proved to be under it, I calculate we shall be able to send to surface in the next quarter from 18 to 20 tons of ore per month, of much the same quality as the parcel sold on Thursday last, independent of the chances of meeting with an improvement in the lode in sinking the engine-shaft. Our engine is working very well, and should it be found necessary to attach another lift of pumps to it I think it may be done by altering or changing some of our pitwork, and thus enable us to drive a 62 fm. level.

NANTEOS AND PENHRW.—H. Boundy, Wm. Paull, Jan. 29: There is nothing new in these mines worthy of special notice since our last report. We have put the men in the 30 east and the 10 west to cross-cut the lode, and will continue to do so during the week, when you shall be duly informed of the result. Our dressing has been retarded on account of the weather, but at present all things are going on regularly.

NANTY.—Jan. 27: The lode in the top level, going north of the boundary, is 5 feet wide, showing spots of lead ore, and looking kindly. The lode in the stope over this level, 6 fms. north of boundary, is 8 feet wide, worth 12 cwts. of ore per fm. The stope over the same, 34 fms. north of long rise, is in a lode 7 feet wide, worth 8 or 9 cwts. of ore per fathom. The lode in the stope over the same, 27 fms. north of long rise, yields 10 cwts. of ore per fm. The stope over the same level, 20 fms. north of long rise, yields 15 cwts. of ore per fm. In the stope in bottom of the top level, south of Mason's winze, 25 fms. north of long rise, the lode yields 8 cwts. of ore per fm. The lode in the roadway level, going north of boundary, is 4 feet wide, looking promising, and yielding good stones of ore. The lode in the 10, above the deep adit, going north of long rise, is 5 ft. wide, producing saving work. The lode in the deep adit, going north of boundary, is large; we are driving on the west side of it, which shows strong spots of ore, and likely to improve. We shall sample 60 tons of lead ore on Monday next, Feb. 3.

NANT-Y-IAGO.—Jan. 29: I was at the above mine last Monday, when I carefully dialled the adit and the 10 fm. levels, and have this morning laid them on paper, on a scale of 4 fms. to 1 in., which shows that we are quite clear of the cross-course: I have not the slightest reason to doubt it. You shall have a diagram of the dialling, &c., in the course of two or three days. The lode in the forebreast is now 4 ft. wide, consisting of capel, and upwards of a ton of lead ore per fm., some few hundredweights of blende, and a little quartz. The walls are firm and well defined, and water is percolating through the lode. At present indications are in favour of our opening out a large and profitable mine, as I said before. We are driving into virgin ground, and shall soon have 50 fms. to 60 fathoms of back over the 10 fathom level, which will generally increase as the level is extended. I hope the result of further development will prove as I now anticipate—opening up a rich mine.

NEW BIRCH TOR AND VITIFER CONSOLS.—J. Symons, Jan. 25: We have taken down the lode in the 24, on the north lode, at Hambley's, and I find that the lode is 2 ft. wide; a rich lode for tin. I shall sample the stuff to-day if I can, and then I will send you the produce of sample, and the number of sacks and the ground driven, so that you may make an estimate of what the end is worth per fm. I have no alterations to notice in this part of the mine since I wrote you last. At Lance's, in the 12 east, the lode is from 18 to 20 in. wide; very kindly, but poor; the ground has made a change for the better at this point, being decomposed granite to the north of the lode. In the 12, west of shaft, the lode is 20 in. wide, very kindly, with good stones of tin, and a small leader of tin on the lode. No lode cut in the cross-cut as yet, but there is civan nearly all over the end.

NORTH BASSET.—T. Glanville, G. Davey, Jan. 29: In the 102, west of Lyle's shaft, the ground is more favourable for driving, and much more water issuing from the end; the lode is 2 ft. wide, chiefly composed of spar. In the 92, west of the cross-cut, the south part of the lode has produced from 1½ to 2 tons of copper ore per fm., but this level is now holed to the pitch, being worked to the west, on the same part; this part of the lode presents a promising appearance going down, therefore we shall put the men to sink a winze on its course in a day or two. In the 82, west of Grace's shaft, the lode is worth 5*l.* per fathom.

NORTH DOWNS.—F. Pryor, J. Grenfell, Jan. 29: We have not yet got the lode in the 60, east of King's shaft; from the appearance, however, of the ground to-day we hope to do so shortly. The 60 west is much the same as last reported on. The same remarks will apply to the 50 west, which is still worth 10*l.* per fm. The winze sinking below the 50 is worth 20*l.* per fm. The 50 east will produce about ¼ ton of ore per fathom, and presenting better appearances. The 40, east of Bennett's, will produce 1 ton of ore per fm. Our pitches continue to look very well.

NORTH MINERA.—Eastern Shaft: In the level driving west the lode is regular and well-defined, and producing saving work for lead. All things being now in a satisfactory state for working, we shall push on this level with all possible energy, as we consider it of the greatest importance to the mine.—Pugh's Shaft: In the 40 yard level, driving east of shaft, the lode is of precisely the same character as last reported, and produces full 4 tons of lead ore per fm. In the level driving north on the caunter lode, at the 35 yard level, good progress is being made, and producing 1¼ ton of lead ore per fm. as last week. The level on this lode, driving south, has improved since last report, and is now worth full 1½ ton of lead ore per fm., and likely for a further improvement. The level driving south on the flat, east of engine-shaft, and the side of the 25 yard level, producing full 1½ ton of lead ore per fm., and very promising. The stope on the north side of the flat, between the caunter and main lode, is producing very fine lead, and likely to continue upwards.—Pugh's Level: This level is driving south to intersect an east and west lode, north of our main lode, and from which large quantities of lead ore have been raised shallow. This lode is in advance of the end about 15 fms. The present end looking very promising, and producing good stones of lead ore.—Wilson's Shaft: The level driving north is without any alteration to notice, producing about 15 cwts. of lead ore per fm. We have sampled 20 tons of lead for sale on the 3d inst., and should have had a larger quantity had not the frost hindered the dressing.

NORTH WHEAL BUSY.—J. W. Crase, Jan. 29: We have commenced sinking a flat-rod shaft, below the 62, by six men, at 14*l.* per fathom. The lode in the 62, east cross-cut, is 3 feet wide, opening good tribute ground. The lode in the rise in back of the 62 is 2 feet wide, worth 10*l.* per fm. I calculate on communicating this rise with the 51 in about two months from this time, which will give us good ventilation, and greatly facilitate our driving the bottom ends east and west. We have discovered a lode below the slide in the 51 east, where it has a good appearance, being 1 foot wide, worth 20*l.* per fm. The lode in the 51, driving west, is 1 foot wide, at present unproductive; the lode in the winze sinking below this level is 3 feet wide, worth 50*l.* per fm. The lode in the 41 east is 2 feet wide, producing occasional stones of tin. There is no change in the south part of the mine since my last. The tribute pitches throughout the mine are a little improved. We shall sample an increased quantity of good quality tin stuff to-morrow.

NORTH WHEAL ROBERT.—W. Godden, Jan. 23: We are getting on as fast as we possibly can with the dressing for next sampling, which I think will be about 220 tons of good quality ore.

— J. Richards, January 29: Murchison's Shaft: I beg to inform you that in Elliot's cross-cut south, in the 52 west, the ground is changing for the better; water is beginning to issue from the end, and small branches are being met with, indicating that we are near the lode. In the 42 west, east of Crowle's winze, on No. 1 south lode, the lode is 18 in. wide, and consists of mundic, capel, and a small proportion of copper ore. In the 30 west, east of Edward's cross-cut, on No. 2 south lode, the lode is at present small (6 in. wide), consisting chiefly of quartz. In the 30 west, east of Edward's cross-cut, on No. 2 south lode, the lode is 18 in. wide, composed of capel, quartz, and a little mundic. In Davies's stope, in the bottom of the 20, east of Toll's winze, on the south part of the lode, the lode is 2 ft. wide, and worth ½ ton of ore per fathom. In Nicholl's stope, in bottom of the 20, west of Toll's winze, on the south part of the main lode, the lode is worth 1 ton of ore per fathom. In the 20, east of Toll's cross-cut, on the north part of the lode, the lode is 18 inches wide, consisting of mundic, quartz, and a small proportion of copper ore. In the 20, west of Toll's cross-cut, on the north part of the lode, the lode is worth ½ ton of ore per fathom. In the stope in the back of the 20 east, and west of Toll's cross-cut, on the north part of the lode, the lode is worth ½ ton of ore per fathom. In the stope in the back of the 20 east, and west of Toll's cross-cut, on the south part of the lode, the lode is worth for a short length 1½ ton of ore per fathom.—Trial Shaft: In the 80 west the lode has become smaller, 18 in. wide, composed of mundic and quartz. In the stope in the back of the 42 west, and near the western boundary, on the south part of the main lode, the lode has been taken down, and it proves to be a good course of ore, worth 40*l.* per fathom. In the 30, east of Bolt's cross-cut, on the south part of the main lode, the lode has become unproductive, being composed chiefly of capel, with a little mundic and quartz; this drivage is suspended for the present, and the men removed to drive west of Bolt's cross-cut, on the south part of the main lode, where the lode is 2 ft. wide, consisting of capel, mundic, gossan, and a small proportion of black oxide of copper. In the rise in the back of the 30 fathom level, on the tin lode, the lode is still small (3 inches wide), compose of capel. We shall sample on Friday next about 245 tons of ore of good quality.

NORTH WHEAL TRELAWNY.—H. Hodge, H. Harvey, Jan. 30: The cross-cut in the 76 is extended west of Magor's shaft 11 fms. towards the lode. Quarry lode, in the 65 south, is 3 ft. wide, producing good stones of lead. The pitches are producing much the same as usual.

NORTH WREY.—T. Kemp, Jan. 30: I regret to state that all my efforts to hold the shaft by the day of your meeting (31st) have proved ineffectual.

OLD TOLGUS UNITED.—W. Gilbert, Jan. 29: The south lode in the 52 west is 1½ ft. wide; I have to-day brought up a small portion of it, and by assaying it prove to be saving work for tin; the lode is also producing stones of yellow copper ore—set to drive at 5*l.* 10*s.* per fm. The 42 west, on this lode, is 2½ ft. wide, producing saving work for tin—set to drive at 5*l.* 5*s.* per fm. The 32 west, on same lode, is at present disordered, but still producing mineral—set to drive at 6*l.* 5*s.* per fm. The new south lode west, in the 52, is small—set to drive at 7*l.* 10*s.* per fm.

PEDN-AN-DREA UNITED.—Wm. Tregay, Thos. Delbridge, Jas. Thomas, Jan. 25: Having arranged the pitwork, fixed cistern, and standing lift in the 110, now sinking the shaft below, brought down main rod from the 90, and cased and divided from the 100 to the 110, we expect to sink below the latter with greater facility; shaft now down 2 fms. below it; set to sink by 12 men. The 110 end east has been communicated with the winze, and we have just commenced stoping the tin ground opened here, which so far has turned out 25*l.* worth of tin per solid fathom. The end is now being driven east of the winze, in a lode worth 25*l.* per fathom for the breadth carried (6 ft.), but it is still wider, the extent of which is not yet ascertained, until developed by the stopers. In the 100 east end the lode is poor; ground favourable for driving, and 40 fms. more to drive to reach Bragg's cross-course. It is worthy of remark here that there has not been a drop of water in all this driving, while the 110 is very wet, showing a strong lode between the two levels, and from the appearance of the lode in both, the natural inference is favourable to a continuous run of tin ground in the lower one. The lode in the 100 west will produce 4*l.* worth of tin per fm. In the 90 west the lode is kindlier in appearance than for some time past, producing good stones of tin, and we are expecting to meet here the run of tin ground intersected by the long rise, which has been holed to the 68, and the ground working on tribute. An 80 fm. level has been set to drive west of the long rise in this level; the value of the lode has been exceedingly variable, now worth 10*l.* per fm. The 90 new rise is still poor, and some fathoms more to rise before we expect to meet the run of tin ground. The 90 west, on Skimmer's lode, driving towards Cobbler's shaft, is worth 8*l.* per fm.—Street and Bragg's: The lode in the 47 east end is still small and poor. In the 40 east a cross-course has intersected the lode, against which it has been spilt up and disordered, but it having been productive until within a few feet of this, we expect the lode to again become productive on leaving it. During the past quarter, notwithstanding the greatest efforts, we have not quite met the cost, which we should have done but for the many hindrances already reported, in breaking machinery. Everything now is in good working order, the points referred to at the meeting have been holed, so that we can reap the advantage from the tin ground discovered, and our adits and shafts are in better condition than ever before; therefore, with the strictest economy that is being observed in every department, we hope to meet the cost while developing the mines. Although the richest points fell off soon after the last meeting the prospects are still very good, the most immediate being the development of the lode at the 110, being the first tin ground met with in the granite of any importance in these mines. This tin ground where cut in the 100 was only 4 fms. in length, while in the 110 already 10 fms. have been driven through, with the end still in a productive lode, the breadth of which has not yet been ascertained; this, in a district where all the mines have been proved into the granite, and found richest there, must surely be regarded as evidence that these mines are not likely to be an exception.

PENDEEN CONSOLS.—Wm. Eddy, J. Warren, Jan. 25: The sump-shaft is sunk down to the 142; we shall drive 1 fm. in each end of the shaft, after which we shall put in skip-road to the 142; the lode in the shaft is about 2 ft. wide, producing copper, mundic, and tin, with occasional rich stones of tin. In the 130 north the lode is 2 fms. wide, yielding 2 tons of ore per fm. In the 118 north the ground is still hard for driving. In the 118 south no lode has been taken down since last reported. In the 106 north the lode is about 2 ft. wide, yielding about 3 tons of ore per fm. In the 94 north the lode is small and poor.

PENHALLS.—R. Pryor, sen., J. Gribble, Jan. 25: Engine-shaft: The lode at this shaft, sinking below the 30, is 3 ft. wide, composed of mundic, peach, and spar, with stones of tin intermixed; the sinking of this shaft been somewhat retarded since we have made a communication in the 30 to the old men's workings. The lift at the western shaft being not large enough to keep the increased quantity of water caused by the late heavy falls of rain, we intend changing the working-barrel at this shaft next week, and replace it with a larger one, which we believe will enable us to keep the water, so that we may make greater progress in completing the sinking of the engine-shaft to the 40, when we purpose cutting south through the gossan, to ascertain if there be any more of the lode in that direction; sunk last quarter about 2 fms. The 30 east is driven east of shaft about 42 fathoms, the last 6 fms. in tribute ground; the lode in the present end is 18 in. wide, and when last taken down was worth 11*l.* per fm.; it is now, however, not quite so good, being worth 6*l.* per fathom. In sinking a winze about 24 fms. behind this end, from the level above, a small branch was discovered, underlying north about 10 ft. in a perpendicular fathom. We have been working on the same, and have it now opened on for about 8 fms. long, where the lode will average about 2½ ft. wide; it being regular and well defined, a tribute pitch is being wrought on it by six men, at 8*s.* 6*d.* in 1*l.* This we consider an important feature, and will, according to its present run, fall in with the lode in the 30 end as it goes east. The 30 cross-cut is driven north about 17 fms., and has intersected several small branches, each containing a little tin; and, judging from the present appearance of the ground, we are inclined to think we are nearing another lode or branch. We may here say that by continuing this cross-cut we shall cut the lode in the tribute pitch before referred to, and another lode seen in the adit level, but which has never been intersected below that point; this cross-cut has been driven 5 fms. 5 ft. 4 in. the last three months. In the 30 west the lode in the stopes, below the old men's workings, is 1 ft. wide, the western end of which is yielding good stamping work. We are still pushing on this important piece of work, so as to lower the water in the level opposite the western shaft, in order to cross-cut a distance of 13 fms. to that shaft, which, when done, will enable us to fork the old mine to the bottom. No time has been, nor shall be, lost in carrying out these operations. In the 20 east the lode is at this time split into two points, the north part being 1 ft. wide, producing good stones of tin; the lode in this end has been disordered by the gossan, but is now getting more defined, and has a very promising appearance; this level has been extended 6 fms. 1 ft. this last quarter. The lode in the winze sinking below this level, which is down 5 fms. 4 ft., is 18 in. wide, worth 6*l.* per fm.; this winze has been sunk by the sumpmen when hindered from working at the engine-shaft. The lode in the 10 end east is small and poor. We have this day set a cross-cut to drive south, believing there is a more productive part in that direction, which has been heaved by the influence of the slide; this end has been driven within the last quarter 5 fms. 5 ft. 3 in. The lode in the winze sinking below this level is 2 ft. wide, worth

POLBREEN.—Jan. 27: No lode has been taken down in the 52 west since my last report; the ground is harder than it has been, so there is but a short piece of it uncovered; we can see good work for tin on the back of it, and it appears to be getting larger. The lode in the 42 west is 8 or 9 in. wide, and very good; there has not been much of it taken down, as the attle is not cleared out of the end; we are going on in killas by the side of it, to uncover a piece more before taking it down; the lode worth about 15*l.* per fathom. The lode in the 42 east is looking kindly, with a little tin. The lode in the 32 east is small and poor, as is also the lode in the 22 east. We have not set the 32 east, the men are put to drive east on the lode we cut in the north cross-cut with the cross-cut men; we opened about 7 ft. on it before setting-day; it is split into branches, which are yielding saving work. I think there is tin enough to pay for driving the end. I hope the branches will fall in together as we get away from the cross-course; it is beautiful ground; we shall be able to continue the cross-cut after the eastern end is in 1 or 2 fathoms more. We have a pretty good lode in the bottom of the 32, east of Dorcas's shaft, and have commenced sinking a winze in it, to see what it is. On the whole, I consider we are looking better than for some time past.

PROSPER UNITED.—W. H. Martin, Wm. Millett, Jan. 30: At Hosking's engine-shaft the sumpmen are engaged in putting in bearers, cistern, &c., preparatory to fixing the plunger-lift in in the 40. At Louisa's engine-shaft sufficient ground has been cut for bearers and cistern for the drawing-lift, which is now being fixed in the 40; this work will soon be completed, and the shaft sunk with all speed. The lode in the 40, east of Louisa's shaft, has improved during the week; it is 3½ ft. wide, yielding stamping work for tin. At the same level west the lode is 4½ ft. wide, producing tin throughout. The lode at Hill's shaft, sinking below the 30, is 5 ft. wide, worth for copper and tin 50*l.* per fathom. In the 30, west of Hill's shaft, the men are at present engaged taking down the north part of the lode. The lode in the 20, west of Hill's shaft, is 4½ ft. wide, worth fully 25*l.* per fathom for tin. The lode in the 30, west of Henry's shaft, is 4 ft. wide, of about the same value as reported last week. The lode in the 20, north of Henry's shaft, continues to yield good stones of lead. There is no particular change to notice in any of the other bargains. We sampled on Tuesday last 106 tons of copper ore.

RIBDEN.—R. Niness, Jan. 30: The lode below the 62, west of Gilbert's shaft, is still yielding good ore, and from the present appearance of the lode in the 70, I soon expect ore in the level as well. The dressing of the ore is being pushed on as fast as we can, and everything is going on well.

ROSEWALL HILL AND RANSOM UNITED.—E. Thomas, Jan. 29: We have intersected the lode in the 115 cross-cut north of the Ransom shaft; it is about 6 ft. wide, producing some rich work for tin, and from its appearance we anticipate by driving a few feet west on its course to get free from the influence of the cross-course of meeting with a good lode, as were the results in the levels above, before we reached the rich ore ground. Nothing has been done in the 110 east since last reported on, the men having been engaged in rising in back of this level, and made a communication with the whim-shaft sunk from the level above, which has well ventilated this part and opened tribute ground; the lode in the end driving west of shaft, on the north part of the lode, is worth 15*l.* per fathom. No change in the 90 end east since last week. The 80 east during the past week has improved; now worth 10*l.* per fathom, and judging from the appearance of the lode it is likely to further improve. The lode in the winze sinking below this level is worth 15*l.* per fathom; the stopes over this level, east and west of Glanville's winze, are worth on an average 14*l.* per fathom. The lode in the winze below the 70, east of Ransom, is worth 12*l.* per fathom. The lode in the winze below the 60 is worth 15*l.* per fathom, which is now suspended in consequence of an increase of water. We have resumed during the 60 end east; the lode in the end is worth 8*l.* per fathom. The tribute pitches continue to yield about the same quantity of tin as for some time past.

ROSEWARNE CONSOLS.—T. Uren, J. Berryman, Jan. 29: The lode in the flat-rod shaft, sinking below the 20, on the caunter, is improved in size; it is now 18 inches wide, of a kindly appearance; we think this lode will soon become productive. In the 40, east of engine-shaft, the ground is favourable for progress; we are pushing on this end with all speed to reach the ore ground gone down in the bottom of the level above. The lode in the 30, east of Ellen's shaft, is not so productive as it has been; a small slide came out from the north, and heaved the lode out of its regular course, consequently it is at present disordered, but we think in the course of a few days we shall be out of this confused ground, and the lode will again resume its former size and quality. No change in the 20, east of Ellen's shaft, since last week. The tribute pitches are looking well, and our returns are increasing. We sampled yesterday 21 tons of good copper ore, which will pay cost.

ROSEWARNE UNITED.—E. Carthew, Jan. 30: At St. Aubyn's shaft the water is in fork to the 80. In the 74, west of Richards's shaft, the lode is 2 feet wide, producing a little copper ore. In the 58, west of Richards's shaft, the lode is 3 feet wide; worth 8*l.* per fathom for tin and copper ore. In the 46, east of Lane's shaft, we are driving to cut the north lode. In the 34, east of Wellington's shaft, on copper bottom lode, the lode is 2 feet wide, producing mundic and stones of copper ore. In the 34 west, on the same lode, it is producing a little copper ore.

SCHULL BAY.—W. Thomas, Jan. 31: The engine-shaft is sunk 4 fms. 2 ft. 9 in. below the 16; sunk this month, 1 fm. 5 ft. 10 in.; the lode is full 6 ft. wide, and consists of spar, carbonate of lime, and good stones of ore, and the ground is more favourable for sinking; bargain continued with nine men. The sump-winze is sunk 2 fms. 3 ft. 6 in. below the 16; sunk this month, 1 fm. 5 ft. 6 in.; the lode has not been taken down during the past week, but, as far as I can judge, it is of the same size and character as the lode at the engine-shaft; bargain continued with four men. No. 3 whim-shaft is sunk 6 fms. 3 ft. below the 8; sunk this month, 1 fm. 1 ft. 2 in.; bargain continued with six men; as they will have to sink 3 ft. more to complete their contract, when we shall cut through the lode in the 16, we have made good this shaft from the deep adit to the shallow adit—14 fms.; and two men have taken a cross-cut to sink from surface to the shallow adit, at 25*s.* per fathom. Stope east of No. 5 winze, in the 8, four men, at 9*l.* 15*s.* per fm. Stope east of No. 5 winze, in the 16, two men, at 4*l.* per fm. Stope west of No. 5 winze, in the 16, two men, at 4*l.* per fm. Stope on Thomas's lode two men, at 8*l.* 10*s.* per fm. All the stopes are producing good work, and our operations in general are being carried out in a satisfactory manner.

SCORRIER CONSOLS.—J. Daniel, Jan. 29: Painter's engine-shaft is sunk 12 fms. below the 30; price for sinking, 8*l.* per fathom, by six men. The cross-cut north in the 30 is extended from shaft 13 fms., and has here intersected a branch from 3 to 6 inches wide, unproductive; price, 4*l.* per fathom, driving by six men; the ground has been harder than usual, but now seems to be again getting easier. The cross-cut south in this level is driven from shaft 28 fms. About 7 fms. behind the present end a small branch was met with, dipping north fast, but not having the bearing of any of the lodes we expect to cut in this level; driving by six men, at at 57*s.* 6d. per fathom. The new shaft is sunk 3 fathoms under the 17; this is intended to intersect No. 1 lode at about 20 fms. deep; sinking by four men, at 75*s.* per fathom. The 17 cross-cut, south from this shaft, is communicated to the workings on No. 1 lode, and the drivage east on its course has been resumed; the lode is 2 ft. wide, producing a little tin; driving by two men, at 4*l.* per fathom. We have cleared the adit level to the extent driven south, and find several lodes beside those mentioned in last report. To what extent they are brought on cannot be known until the levels are cleared of stuff. To effect this we have commenced clearing up Highburrow shaft.

SORTRIDGE CONSOLS.—J. Richards, Jan. 29: In the 42 west, and west of Williams's rise, on the north part of the main lode, no lode has been taken down; about 7 fms. of the lode is now laid bare, and, judging from the appearance of the wall, when again taken down it will yield well. Where last worked upon it is worth 2 tons of ore per fathom. In Williams's rise, in the back of the 40 west, the lode is worth 1 ton of ore per fathom. In the 40 fm. level west, and west of Rowe's cross-cut, on the north part of the lode, the lode is 2 ft. wide, and, although promising, is without sufficient ore to be of any marketable value. In Mayne's stope, in the back of the 50, on the south part of the main lode, the lode is worth 2 tons of ore per fathom. In Crew's stope, in the bottom of the 40, on the south part of the main lode, the lode is worth 1½ ton of ore per fathom. In the 30 east, and east of White's cross-cut, on the south part of the main lode, the lode is 3 ft. wide, consisting of mundic, peach, and quartz. In Dunn's rise, in back of the 20 fathom level, on the south part of the lode, no lode has been taken down for the last 6 ft.; it has, however, been cut into a little, and looks very good. The sampling, of 130 tons on Friday next, is ready, and sent to quay.

SOUTH BULLER AND WEST PENSTRUTHAL.—W. Pascoe, S. S. Bice, Jan. 29: The ground in the cross-cut is a little improved; the price given for driving is 16*l.* 10*s.* per fm. No. 1 lode is composed of quartz, fluor-spar, with some grey and yellow copper ore, being improved in appearance since our beginning to drive upon it.

SOUTH CARADON WHEAL HOOPER.—W. C. Cock, Jan. 25: At our setting, held yesterday, the following bargains were taken:—The 90 fm. level cross-cut north, by six men, at 18*l.* per fm., being the former price. The rise above the 62, on No. 7 lode, by six men, at 16*l.* per fm., being an advance upon the former price of 3*l.* per fm., consequent on the deadness of the air, and not by any increased hardness of the ground. The 47 fm. level cross-cut north, by six men, at 12*l.* per fm.; former price 13*l.* per fm.; the ground is a little improved, and shows signs of further improvement. The winze below the 47, on No. 7 lode, by six men, at 16*l.* per fm.; former price 15*l.* I hope we shall effect a communication between this winze and the rise above the 62 very soon, when the driving of the 62 west, on the same lode, will be resumed, which is a very promising point. We have suspended the 90 west, in order to lessen the cost for a while.

SOUTH CRENVER.—E. Chegwin, Jan. 28: In the flat-rod shaft, sinking below the 105, the lode is 1½ ft. wide, producing stones of ore, but not to value. In the 105, east of flat-rod shaft, the lode is 2¼ ft. wide, producing 2 tons of copper ore per fm., and ground favourable for driving.—South Mine: In the 51, east of cross-cut, the lode is 2½ ft. wide, producing stones of tin, and spots of copper ore. In the 51, west of cross-cut, the lode is 1½ ft. wide, producing good tinstuff. In the winze sinking in bottom of the 32 the lode is 2 ft. wide, producing good tinstuff, worth about 8*l.* per fm. In the rise in back of the 32 the lode is 2½ ft. wide, producing good tinstuff, worth about 5*l.* per fm.

SOUTH DOLCOATH AND CARNARTHEN CONSOLS.—Wm. Roberts, Jan. 28: We shall sample to-morrow, Wednesday, (computed) 16 tons of ore. In the 50 east the lode has been taken down since 1 st reported, but the men told me yesterday they think it is getting larger and better for ore. In the adit some good stones of ore are being broken on a lode about 1 ft. wide, gone off to the north of the caunter.

SOUTH LEVANT.—J. Carthew, Jan. 29: The men have cleared the shaft down to the deep adit level, which is about 50 fms. east from the mouth (or tail) of the level. Yesterday they cleared all the stuff in the level, and got into the end, which is about 3 fms. east from the shaft, making about 58 fms. east from the cliff. The lode in the end is 3 ft. wide, containing tin throughout; we shall now drive this level east under the tin ground with all speed, and as soon as I can get a load of timber brought here I shall put men to clear the level out on the north lode. The mine is looking better than what I told you; we have a splendid prospect before us, which can be opened up with very little cost.

ST. DAY UNITED.—E. Ralph, J. Cock, Jan. 25: Our pay and setting went off very well. The prospects are much the same. The shaft at Billing's still continues to look well, worth 75*l.* per fm. The bottom end in the 162 west is worth 50*l.* per fm.; the same level east is worth 40*l.* per fm. The stopes in the end of this level are worth 9*l.* per fm. The 154 west is worth full 10*l.* per fm. Nothing new in any other part of the mine. We sold to-day 26 tons, and shall sell next week about 34 tons more, and have broken in addition to this 15 tons. We are pushing on as fast as possible with our work for the new engine.

ST. IVES WHEAL ALLEN.—H. Taylor, Jan. 30: At Roderick's engine-shaft the lode in the 10, east of shaft, is 2 ft. wide, worth 20*l.* per fathom. In the 30, east of Giesler's flat-rod shaft, the lode is 15 in. wide, worth 15*l.* per fm. The stopes in back of the 50, east of Giesler's shaft, the lode is 18 in. wide, worth 7*l.* per fm. In the stopes in the back of the 50, east of boundry winze, the lode is 2 feet 6 in. wide, worth from 5 to 10*l.* per fm. In the stopes in back of the 20, east of Louisa shaft, the lode is 9 in. wide, worth from 4*l.* to 6*l.* per fm. No alteration to notice in any other part.

ST. JUST UNITED.—J. Carthew, Jan. 30: Since my return from town I have been here early and late, ordering, watching, and following up the men, for I am determined to get the works in good working order for the engineers, previous to erecting the steam-engine, &c. The pitman and three able miners are still employed cutting down and timbering up the engine-shaft, preparatory to commencing to build up the same. I expect the miners will finish work this week; four miners are clearing out the deep adit level, and I am glad to report to you that they have cleared home to the engine-shaft, which is about 50 fathoms from the mouth (or tail) of the adit. Four men have been removing earth for the foundation of the blacksmith's shop, which will be commenced this day. To-morrow the masons will commence building the shop. I have two men clearing out and wheeling away stuff for the foundation of the carpenter's shop and two men are employed sawingtl mber into planks, &c., and one carpenter making barrows and sundry miners' and other tools. I have engaged other miners to come here next month, after I have got tools ready for them, as I am very anxious to clear out Wheal Owl adit level, clear up Wheal Widden adit, and other shafts, and the Red Dipps shaft, also to clear away the overburden now lying where our stamps-plat and dressing-floors will be laid out for dressing our tin. Therefore, so far all our operations here are in a very forward state of progress, considering from the time we commenced, as well as being exposed to the inclemency of the weather here, as nearly all of our labourers have been uncommonly exposed to the westerly winds, and very heavy rains; in fact, until within a few days the men had no place for shelter; however they have withstood it all uncommonly well, as every miner around here is anxious to see those mines in full course of working. I am determined to use my influence and exertion to see the works carried out in a mining-like manner, combined with judicious economy.

TOLCARNE.—Jan. 29: Field's Lode: The lode in Field's shaft, sinking below the 30, is 2 ft. wide, composed of gossan and spar. The lode in the 30 west is 16 in. wide, chiefly of spar. In the 30 east the lode is 18 in. wide, composed of gossan and spar—a kindly lode. The lode in the 20 west is 14 in. wide, composed of gossan and spar. In the 20 east the lode is 2 ft. wide, composed of gossan and spar, and good stones of ore—a kindly lode. The lode in the winze sinking in bottom of the 20 west is 20 in. wide, composed of spar and ore, yielding 1¼ ton of the latter per fm. The lode in the 10 east is 14 in. wide, composed of gossan, spar, and ore.—Enthoven's Lode: In the stope in bottom of the adit, west of cross-cut, the lode is 5 ft. wide, worth 25*l.* per fm. The ground in the adit cross-cut south, and in the rise against King's shaft, is hard granite.

TOLVADDEN.—T. Gundry: The ground continues favourable for sinking the engine-shaft. At our monthly setting on Saturday last we set twelve pitches. The lode in the 60 is worth 20*l.* per fm. Other parts of operation just as last reported.

TREHILL.—H. Rickard, Jan. 28: We have cut through the lode at the 50, and find it to be 2½ ft. wide, composed of spar, capel, and mundic, with strings of copper ore; we have commenced driving north on its course; it has an increased appearance in size, and letting out water freely. The both tribute pitches, east and west from the western shaft, in back of the 40, are yielding very good work, and the men earning fair wages. We have commenced dressing as fast as possible. The machinery is in good working trim.

TRELOWETH.—T. Richards, Jan. 30: We sampled on Tuesday 73 tons of copper. There is no point of variation in the bargains worthy of notice.

TRENCROM.—R. Hollow, F. Bennetts, Jan. 30: Giesler's engine-shaft, set to sink below the 100, by six men, at 10*l.* 10*s.* per fm. The lode in the 100, east of Giesler's engine-shaft, is worth 3*l.* per fathom; set to drive, by two men, at 2*l.* 5*s.* per fm. The lode in the 100, west of the engine-shaft, is worth 2*l.* per fathom; set to drive, by two men, at 2*l.* 14*s.* per fathom. The lode in the 90, east of the engine-shaft, is worth 5*l.* per fm.; set to drive, by two men, at 2*l.* 15*s.* per fm. The winze sinking below the 80, east of the engine-shaft, is opening tribute-ground; set to sink, by four men, at 3*l.* per fm. Hollow's shaft is sunk below the 30 fm. level 4 fms.; set to sink, by four men, at 8*l.* per fm. The lode in the 30, east of Hollow's shaft, is worth 2*l.* per fm.; set to drive, by two men, at 2*l.* 10*s.* per fathom. The lode in the 30, east of Michell's flat-rod shaft, is worth 5*l.* per fm.; set to drive, by three men, at 3*l.* 10*s.* per fm. The lode in the 30, west of the flat-rod shaft, is worth 6*l.* per fm.; set to drive, by three men, at 4*l.* per fathom.—New Lode: The lode in the 60, east of the cross-cut north, is worth 2*l.* 10*s.* per fm.; set to drive, by two men, at 3*l.* 10*s.* per fm. The lode in the 60, west of the cross-cut north, is worth 2*l.* 10*s.* per fm.; set to drive, by two men, at 3*l.* 10*s.* per fm. The 100 cross-cut north, set to drive by four men, at 3*l.* 10*s.* per fm. The 60 cross-cut, set to drive south, by two men, at 2*l.* 10*s.* per fm.

TREVENEN AND TREMENHEERE.—J. Webb, Jan. 29: The 170 is going east favourably. I hope in a few days we shall take up the eastern water. We find the old engine-shaft clear from rubbish 5 fms. below the 170. The stopes in the 170 are not quite so good as they have been, but still turning out good tin-tuff. We notice some branches dropping down from the north that will fall into the lode a few fathoms deeper; such branches seldom fail improving the lode as they drop into it. There is nothing new to notice in the upper levels since last week's report.

TREWEATHA.—Jan. 28: The ground in the cross-cut is not quite so favourable for driving; the end is letting down a large quantity of water. The lode in the 30 south is still worth 4 cwts. of lead per fm. In this level north the lode is small, and at present poor. The rise in back of the 30 south is worth 3 cwts. of lead per fm. In the winze sinking in bottom of the 15 south the lode is 3 ft. wide, composed of capels and spar. The stope in back of this level is worth 4 cwts. of lead per fm.

TRUMPET UNITED.—G. R. Odgers, Jan. 25: The lode in the engine-shaft is from 1 ft. to 18 in. wide, principally mundic, but it is producing a little more tin; this we think is a very promising lode. The lode in the 25 west is 8 in. wide, and worth from 7*l.* to 8*l.* per fm.—a very kindly lode. There is no particular alteration in the 15 west, save there is more water issuing; this we take to be a good symptom.

UNITED MINES (Tavistock).—J. Tucker, January 29: Our tribute department is much improved.

VALE OF TOWY.—A. Waters, T. Harvey, Jan. 28: In the 110 fm. level, driving south of Clay's engine-shaft, the lode is without change since last reported on; the ground is favourable for progress, and we calculate upon intersecting the great cross-course in about 2 fms. further driving. In the 100, driving north of the said shaft, the lode is 2 ft. wide, composed of carbonate of lime and barytes, mixed with blende, but not to value; in the same level south the lode is at present composed chiefly of light grey elvan, with streaks of blende and copper ore throughout. The country, as well as the lode, is getting softer than for some time past, and the water flowing from the bottom of the end, consequently we may calculate on a favourable lode in the vein stuff shortly. In the 90, driving south of Field's shaft, the lode is yielding rocks of blende and stones of lead ore, of a promising character; the ground about here will all pay to work for blende and lead ore. In the new adit, driving south of Nant, the lode at present is smaller than usual, and the ground hard. The tribute department is much the same as for the last few months. We sampled, on Saturday last, 40 tons of average quality lead ore.

WENTNOR (Pantasa).—J. Kemp, Jan. 30: Grosvenor Shaft: The men in the 92 yard level east are making good progress, having driven since my last 2 fms. 1 ft.; total length 4 fms. 2 ft. 6 in.; the lode is large, composed of soft spar, carbonate of lime, and some good lumps of ore; from its appearance I am expecting daily to cut into a deposit. I sent off the b x containing one stone of lead, weighing 93 lbs., last Saturday. This can be seen at the offices of the company.

WEST BASSET.—W. Roberts, Jan. 29: I cannot speak of any improvement in the mine since reported for the meeting on Jan. 22.

WEST KAME (Lochwinnoch).—Capt. Bailey: In compliance with your request, I have carefully examined this mine, and the following is my report thereon:—This sett is situated about 2½ miles from the village of Lochwinnoch, and is a westerly continuation of the ground now so successfully worked by the Lochwinnoch Consols Copper Mining Company. The lodes of this mine (Lochwinnoch Consols) traverse the entire length of West Kame, whilst the workings of this extraordinary mine are being regularly advanced towards it, and are now only some 50 or 60 fms. distant from the boundary. The property is characterised by a very irregular surface. The prevailing rock formation being amagdaloid, elvan, and porphyritic courses, in which the lodes are embedded, and which appear to be the main geological formation of the copper mines of this district. The present operations are confined to the exploration of what I may term the north lode. On the south lode nothing of importance has been done, either in depth or extent to justify me in forming an opinion; therefore, my observations will be more particularly confined to the lode in question. The direction of this lode is 10° south of east; its walls are well defined, averaging from 7 to 10 ft wide, with an underlie of about 3 ft. in a fm. It has been laid open in the usual way, by costeaning pits and shallow trial shafts, and proved to be regularly continuous for upwards of 250 fms. in length, showing wherever opened on a strong back, highly charged with grey copper ore, also the green carbonate of copper. At No. 1 shaft, in the bottom there is a productive lode, which will pay for being taken away either on tutwork or on tribute, provided proper machinery be erected to drain the water, which at this point is very abundant. About 150 fathoms west of this is No. 2 shaft, which has been sunk to the back of the adit level, where a desirable communication has been effected. The stopes No. 1 and No. 2, east of this shaft, in the back of the adit level, are now getting very near the surface, consequently the lode is not so rich as it has been. In a winze sunk in bottom of the adit level, 12 fathoms east of said shaft, it is said the lode displays great strength and richness, but the influx of water being great they were compelled to abandon it; this, however, would not admit of being examined by me, as the winze was filled with water, and your agent not being advised of my visit to inspect, did not get it drained as he otherwise would have done. The most valuable parcel of ore as yet returned from the mine I am told came from this winze. No. 3 shaft has been sunk through ore as far as your present mode of draining will admit of its being sunk, the water here being exceedingly quick. The stopes in close proximity with this shaft are yielding good quality grey copper ore. It is from these points, Nos. 1, 2, and 3, that your returns have been made. In conclusion, I beg to state that after reviewing all the features connected with this undertaking, I am induced to form a very high opinion of its value. The general indications and appearance of the lode, together with the ore ground already laid open, are to me sufficient guarantees of ultimate success on attaining deeper points. The mine at present has an established value, and when the lodes are properly laid open will undoubtedly become steadily profitable.

WEST PAR CONSOLS.—H. G. Webb, Jan. 30: The lode in the 65 end east is 20 in. wide, with tolerably average work for tin, and promising to improve. The lode in the 55 end is 1 foot wide, of a promising character, but only occasional stones of tin as yet; there is not much alteration in the stopes. The tributers are working with good spirits, and most of them earning a livelihood. The stamps are working well, and we have commenced calcining the tinstuff.

WEST POLMEAR.—W. Body, Jan. 30: The 20 fm. level cross-cut is driven south of the engine-shaft about 67 fms.; we have about 3 fms. to drive to intersect the third lode; driving at 6*l.* 10*s.* per fm. We have driven east of the cross-cut on No. 2 lode about 4 fms.; no alteration to report; driving at 3*l.* 5*s.* per fm. On the north lode, east of the engine-shaft, we have driven about 36 fms.; the lode is about 1½ ft. wide, composed of peach, spar, and mundic; driving at 2*l.* 10*s.* per fm.

WEST SHARP TOR.—Wm. Richards, Jan. 27: The part of the lode carried in the 150 east is 5 ft. wide, containing gossan, capel, quartz, and a little grey copper ore; the end is still very wet. The part of the lode carried in the 162 east is 5½ ft. wide, being composed of capel, quartz, and on the footwall a part 21 inches wide, containing gossan, quartz, and prian, spotted with grey copper ore. There is no change in the cross-cuts. The ground in Morris's shaft is elvan, and fair progress is being made.

WEST WENDRON CONSOLS.—R. Kendall, Wm. Hosking, Jan. 25: The engine-shaft is sunk about 3 fms. under the 10; lode producing stones of tin, not much to value. The lifts and timberwork in the flat-rod shaft are completed, and shaft sunk 6 ft. under the plat; lode 3 ft. wide, but has not been taken down this week.

WEST WHEAL MARGARET.—Wm. White, Jan. 28: The lode in Essex shaft is 12 in. wide, producing a little tin, but not of any value at present.

WEST WHEAL TREVELYAN.—J. D. Osborn, Jan. 25: In the 58, driving west of Cater's, there has been no lode taken down this week. The stope in back of the 48, west of Cater's, east of cross-course, is worth 10*l.* per fm. A stope further east in said level is worth 4*l.* per fm. The stope in bottom of the 48, east of No. 3 winze, is worth 12*l.* per fathom. The rise in back of the 48, against Charles's shaft, is up 8 fms. The rise in back of the 38, against Charles's shaft, is up 6 fms. The rise in back of the 20, against Charles's shaft, is up 6 fms. There is no alteration in any other part of the mine since last reported on.

WHEAL AGAR.—W. Roberts, Jan. 27: Tutwork Setting: Windstow engine-shaft to sink under the 90 by nine men, at 28*l.* per fm. The 90 east by four men, at 9*l.*; there the lode is 3 ft. wide, producing good stones of ore, and is likely to improve; the same level to drive west by four men, at 7*l.* 10*s.*; the lode in it is 2½ ft. wide, with occasional stones of ore. The 80 east by four men, at 6*l.*, with the lode in the end 1½ ft. wide, producing stones of ore. The rise in the back of the 80 by four men, at 7*l.* 10*s.* per fathom; this is to hole to the winze sinking under the 70, the latter is by four men, at 8*l.* per fm. A stope in the back of the 80 by four men, at 5*l.*, where the lode produces 4 tons of ore per fm. The 70 to drive east by four men, at 6*l.*; here the lode is 3 ft. wide, producing a little saving work. The 60 west by four men, at 6*l.* The 60 cross-cut north by two men, at 7*l.* A winze under the 60 by four men, at 6*l.*, and the adit west by two men, at 7*l.* 10*s.* per fm. The rise in the back of the 70, reported last at 4 tons per fm, is now set to four men, at 5*s.* in *l.*, tribute. We calculate on having broken since sampling about 60 tons of ore. Altogether our prospects are favourable.

WHEAL ARTHUR.—Jan. 30: Edward Lode: The lode in the 50 east is 3 ft. wide, yielding 1 ton of ore per fathom, and likely for a further improvement shortly; this end is driving by two men, at 5*l.* per fm.—Middle Lode: The lode in the 50 east is 1½ ft. wide, producing 1 ton, or 6*l.* per fathom. The lode in Rook's rise and stope, in back of the 50 east, is 2 ft. wide, worth 8*l.* per fathom; working by four men, at 30*s.* per fm. The lode in Burley's rise and stope, in the back of the 50 west, is 2 feet wide, worth 10*l.* per fathom; stoping by four men, at 20*s.* per fathom, 6 fms. stent. The lode in Walter's winze, in bottom of the 50 west, is 1½ feet wide, composed of spar, prian, mundic, and good stones of copper ore. We have put four men to drive through the cross-course in the 40, in order to cut the lode east of the cross-course, and I expect we have 4½ fms. to drive to reach the lode: this end is let at 4*l.* 10*s.* per fathom. The lode in the adit level west is 2 feet wide, composed of spar, prian, mundic, and good stones of copper ore; driving by four men, at 4*l.* per fathom.—Old Lode: The lode in the 50 west is 4 ft. wide, worth 9*l.* per fathom; driving by four men, at 7*l.* per fathom, 1 fathom stent. As the ground is very changeable in this lode we have set but 1 fm. at that price. The lode in Job's rise and stope, in back of the 50 fm. level west, is 3 feet wide, worth 8*l.* per fathom; working by four men, at 40*s.* per fathom. The lode in the adit level west is 4 ft. wide, yielding 1½ ton of ore per fathom; driving by four men, at 6*l.* per fathom. The lode in Palmer's stope, in back of the adit east, is 3 feet wide, worth 6*l.* per fathom; stoping by two men, at 40*s.* per fathom. We have now 20 men driving six levels, average price 6*l.* per fathom; 14 men in five rises and stopes, at an average price of 38*s.* per fathom: making in all 40 men on tutwork for the month of February, and there are two other promising places in which I shall place four men additional next week. We have sent to Calstock Quay about 130 tons of copper ore, to be sampled to-morrow, all of which has been broken and dressed during the past week.

WHEAL CUPID.—R. Pryor, sen., Jan. 25: The lode in the 40, west of the engine-shaft, is 3 ft. wide, composed of mundic, spar, and peach, with a little yellow copper ore intermixed; this end is letting out water freely, and is within 4 fms. of the bottom sunk below the 24, where the tributers broke some good ore, and could not do any more for the water. The ground in the cross-cut continues favourable for driving.

WHEAL EDWARD.—M. H. East, Jan. 25: South Lode: In the 92 west the lode is opening wider, being now 2½ ft. wide, and producing stones of ore. In the 81 west we are driving by the side of the lode. In the 61 west the lode is 4 ft. wide, and shows a little improvement. The lode in Peter's stope, below the 61 west, will produce 5 tons of ore per fathom. The lode in Small's stope, below the same level, will also produce 5 tons of ore per fathom on an average. In Forrest's winze, below the 80 west, the lode is worth 6 tons of ore per fm. for the length of winze, 9 ft. The lode in the 40 west is worth 2 tons of ore per fathom. The lode in No. 4 rise, in back of the 50 east, is worth 3 tons of ore per fathom. There is no alteration at any other point in the mine of much importance since last reported on.

WHEAL GRENVILLE.—G. R. Odgers, W. Bennetts, Jan. 25: The lode in the 100 west is from 18 to 20 in. wide, of quartz, peach, &c., with stones of ore, presenting very much the same appearance as the lode in the level above, prior to the improvement. The lode in the 100 west is 18 in. wide, of quartz, &c., with black, grey, and yellow ore, yielding full 1 ton per fm.; this is a very promising lode. The lode in the 90 west is 10 in. wide, of peach, quartz, &c., with ore, saving work. There is no alteration in the 80 east or west of the shaft. The ground in the 80 fm. level cross-cut is getting ruddy, and is easier, looking as if we are approaching the lode.

WHEAL GRYLLS.—E. Rogers, Jan. 30: There is no alteration in any part of the mine since last reported on. Annie's engine-shaft is progressing favourably, now down 6 fms. 3 ft. below the 20, and the lode worth full 25*l.* per fm. I will write you a full report next week, and let you know in a day or two when the stamps will go to work.

WHEAL HARRIETT.—S. Williams, Jan. 25: The lode in the engine-shaft is 1 ft. wide, producing stones of tin. The lode in the 114 end is more promising to improve than I have seen it for several fathoms driven through; I have broken to-day some very good stones of tin from this end. The lode in the 100 is 1 ft. wide, with a little tin in it. The lode in the deep adit end is 6 in. wide, producing stones of copper ore; this end is not yet out of the influence of the cross-course.

WHEAL HENRY.—F. Pryor, E. Ralph, J. Cock, Jan. 28: Our tin lode in this mine is not rich. The principal chance for copper is to drive the cross-cut at the 70, to cut Wheal Maid lode, which has produced large quantities of ore, and is an ordinary speculation; this will be done for very little expense, the same being dry at this level. The accomplishing of this and other objects will be done without working the engine, consequently very inexpensive.

WHEAL HOPE.—W. H. Reynolds, Jan. 28: In the 14, on the middle lode, we are looking better; the lode yielding saving work for lead. In the 28 cross-cut we have cut the middle lode 9 in. wide, composed of spar, prian, &c., with mundic and lead. We think this lode will improve as we drive south-west towards the junction with the south lode. We have cleared the 28 east of the slide, and nearly into the end; the backs are worked away to a very considerable extent west of the slide, and we have met with a part of the lode going off south-east, on east of the slide, that is yielding some rich lead ore. We hope soon to have to report having met with a good lode at this point. The pitches are all yielding some lead, and the men expect to gain fair wages this month.

WHEAL NORRIS.—J. Nance, J. Andrews, Jan. 25: The ground in Cremorne engine-shaft is not so favourable for sinking as it has been, consequently the progress is not quite as much this week as usual. No. 4 lode in the 15, east of the Cremorne shaft, is about 3 ft. wide, and showing a very kindly appearance. The cross-cut driving south of No. 4 lode, at said shaft, continues very easy for driving. At Carter's shaft the shaft-men are now engaged in making the necessary preparatory fixtures for the 10-in. tye lift, and to connect the pumping gear to the large engine; when we have completed these alterations the sinking of Carter's shaft will go on without any further difficulty or impediment from the water. No. 4 lode in the 15 fm. level end, driving east of Carter's shaft, is about 4 ft. wide, saving work for tinstuff, and most splendid in appearance. No. 3 lode in the 15 east end is not so hard as it is further back; we hope to meet with an improvement in this end shortly. No. 3 lode in the 15 west is 3 ft. in width, and still hard. The ground in the 15 fm. level cross-cut, driving north of No. 3 lode, at said shaft, is rather harder than it was when we wrote to you last. We have been pushing on the preparatory work for attaching the flat-rods to the new engine for pumping at Carter's shaft, and the drawing gear from the steam-whim for drawing the stuff at Carter's shaft, but the weather this week has been very wet and windy, and we have not been able to do as much as we could wish, but the weather to-day is very much moderated, and should it continue a few days longer we hope to complete these arrangements.

WHEAL PROSPIDNICK.—R. Kendall, R. Sincock, Jan. 25: Watson's shaft is sunk 7 fms. 3 ft. under the 22; the lode is producing some rich stones of tin, and the ground very much improved; this shaft is sinking by nine men, at 15*l.* per fm. The 22 east is driving by three men and three boys, at 4*l.* 10*s.* per fm.; lode worth 5*l.* per fm. The stopes in back of the 22 east are working with nine men and one boy, at 2*l.* 12*s.* 6d. per fathom; lode worth about 8*l.* per fm. The winze east of Watson's shaft, below the 12, is sinking with six men, at 5*l.* 10*s.* per fm.; lode worth 4*l.* per fm.; this winze is now passing through a cross-course, which has changed the lode, and made the ground a little harder for the present. The lode in the cross-cut is 1 ft. wide, of a kindly appearance, but at present unproductive; we have not been able to open on it this week, as we have been obliged to keep the men up to assist about making flues to the burning-house.

WHEAL SICILY.—J. Symons, Jan. 28: We have forked the mine and cleared the run, but the sweep-rods attached to the cranks of the wheel are frequently breaking, and causing us a good deal of delay; and, therefore, I think it best to stop the wheel for a day or two, and put on stouter sweep-rods, and we can at the same time effect some little repairs required about the wheel-pit, and get into thorough good working order. There is no particular change in the lode in the adit end as yet; we have not yet got into blue ground, and until we do we can hardly expect any improvement: the channel of ground, however, seems to be changing, and as in driving the next 30 fms. we shall get probably over 20 fms. of backs we may be daily looking for an improvement here.

WHEAL SHEPHERDS.—H. Bennetts, Jan. 29: The lode in the adit end is much the same as for some time past, about 4 ft. wide; this end is driven in a good mineralised stratum of ground, and there is not much doubt that when the lode is properly wrought on profitable results will be gained.

WHEAL SIDNEY.—W. Edwards, Jan. 30: Since the general meeting the 46 winze has been sunk through a lode quite equal in quality to what was then reported. The rise from the 60 is up about 3½ fathoms. If all go on well we shall get through in less time than I thought. The ground has been marked out for the engine-house, and the men are excavating to commence its construction. No other alteration to report.

WHEAL UNITY CONSOLS.—W. H. Reynolds, Jan. 29: In the 85 east the lode is yielding 1 ton of ore per fm. In the 75, west of great cross-course, the lode is large and promising, but not of any value at present. The lode in the 50 west is now entering the elvan course, and is 2 feet wide, composed of spar, peach, &c., with a mixture of black copper ore, and looking very kindly for a good improvement. Nothing out as yet in either of the cross-cuts at the 50. We sampled to-day 24 tons of copper of fair quality.

YARNER.—R. Barkell, Jan. 29: The branch in the 40 west is without alteration; there are two other branches near, making altogether about 10 in. wide; the ground in the cross-cut in the 40 is showing indications that the lode is near. In the cross heads we find mundic, and they are letting out water freely. The lode in the stope east of shaft is rather disordered at present, owing to a horse of killas coming into it; but this we think will wear out again shortly. The western stope is looking well, and will yield 5 tons per fm. The 30 west is looking rather better; the part of the lode we are carrying (4 feet) is orey throughout. The winze sinking below this level is producing from 2 to 3 tons per fathom.

COPPER PYRITES IN NORWAY.—For the last six years a small and advantageously situated copper works has been in continuous operation in Norway, and considering the amount of capital embarked, the result has been satisfactory, but as the water has now become too powerful to be kept by horse-whim, and the proprietors are unable to provide the necessary steam-power, it has been decided to sell the mines and works as they stand, in order to obtain a return of the outlay already incurred. A report of the present condition of the works has been made by Mr. Martin Rask, Cand. Min., of Norway, who reports that the Eker Copper Works are situate in the parish of the same name, in the

WEATHER PREDICTIONS.

TO THE EDITOR OF THE MINING JOURNAL.

SIR,—The unsettled weather for the past week, as also the gales for the 29th and 30th, the latter of which is now raging, were accurately predicted by me. For the coming week, after the present gales are past, beyond some changeable weather, there will not be much that calls for any special remark. We may have some strong winds about the 5th and 7th, with a gale on the 11th. G. SHEPHERD, C.E.,

Throgmorton-street, E.C., Jan. 30. Author of "The Climate of England."

SANTA BARBARA.—The latest intelligence received by the directors with regard to the position and prospects of the property acquired by this company is of the most satisfactory character. The freehold of four square miles, comprising several mineral properties, provided with machinery, and one mine already producing profitable returns of gold, have been secured for 1200*l.* Other parties, working mines in Brazil, were willing to pay a larger amount for the property, but failed to enter into negociations until after the purchase had been effected upon behalf of the company. A large majority of the shares are held in Liverpool by influential mercantile men.

SILVER IN SOUTH WALES—MWYNDY IRON ORE COMPANY.—Whilst attention has recently been directed to the gold discoveries in the neighbourhood of Dolgelly, in the district of North Wales, a discovery of scarcely less importance has been made in the southern principality, silver in this instance being the mineral brought to light. The ore of the Mwyndy Iron Ore Company has recently undergone a most careful analysis from two independent authorities of great eminence, and in the ore known as the Blue Rock, which forms the chief portion of the deposit at Mwyndy, being upwards of 20 ft. thick, the assay shows in one instance 33 oz. of silver to the ton of ore, whilst in the later assay the quantity is increased to 37 oz. to the ton. The value of the ore for smelting for iron is 10s. per ton; the true value put upon it for silver enhances it from 5*l.* to 8*l.* per ton, according to the difference of yields. It is anticipated that a special general meeting will be shortly summoned, to lay before the shareholders this important result.

WARMLEY COLLIERY AND SPELTER WORKS COMPANY.—We understand that more than sufficient capital has been already subscribed, by most influential applicants, for establishing this company; and that the shares are now at ½ to ⅝ prem. The list of subscriptions will be closed on Monday.

MINING, AND THE FISHERIES ACT.—There is some danger that mining enterprise will be checked by the Fisheries Act of 1861, and its suggested amendments. The Act in its present state is most imperfect, and far short of that which it was designed to accomplish. But it makes future legislation more easy, and those who are concerned in mining operations should watch the new provisions with vigilance. It must not be supposed that we object *per se* to the preservation of the fisheries throughout the country, for we start with the conviction that no impediment should be thrust in the way of those who promote that object, but care should be taken not to interfere with mining, by the introduction of certain provisions into the amended Act which would arrest the progress of the miner in the working of his setts; and we allude to the subject at this moment for the purpose of directing attention to the discussions of the Fisheries Associations, now in course of formation, in those counties where the rivers traverse mineral ground. It will be seen from what has already taken place that provisions may be inserted into the Act, as promoted by the Inspectors of Fisheries and the associations they control, which would have an important bearing on our mines. These provisions should be analysed and fully discribed before they are introduced to Parliament, because the House of Commons is not competent to deal with them. They refer to practical matters, which miners alone know in detail. We may readily ascertain the nature of them from the recommendations of the Inspectors, who will, no doubt, observe the utmost caution in expressing their views, in order to avoid opposition in Parliament. We propose entering upon this important subject, which is barely rife enough at present for action, yet, as representing the mining interests of the country, we invite our readers to a consideration of it, in the hope that some conclusion might be arrived at satisfactory to those who are connected with mines, and to those who wish to preserve the salmon and trout of our rivers: and, in the first place, we would refer to a meeting of the Tivy Fisheries Association, which was held last week at Newcastle-Emlyn, in South Wales. There was a full attendance of gentlemen, and Mr. Ffennell, one of the Inspectors of Fisheries under the new Act, who was present to direct the deliberations, said—"There was one question upon which he had great anxiety. He referred to the action of the lead mines on the rivers in Wales. The Ystwith and the Rheidol were entirely destroyed; there was not a single fish in them. Now, the Act provided that reasonable means should be used to prevent the destruction of fish. He was fully aware of the importance of mining, and he should be the last to suggest anything which would interfere with it in the least; but it was thought the mischief might be avoided without any detriment to the mining interests. He wished it to be understood that he could not speak with authority on the subject, having had no experience in the matter, but in going through the country he endeavoured to obtain information, so as to remedy the evil if possible. An old miner told him that the fish in the Rheidol and the Ystwith were destroyed in his time by the process of stamping or pulverising the mineral; before this process was introduced there were fish in those rivers, and he had himself frequently caught them. He had been told by others that they also remembered salmon there. He had recently had some conversation with Mr. Bail, the intelligent manager of a mine about three miles from Lampeter, who had worked mines in Spain and in other countries, and he was of opinion that stamping should be given up, because it was not so profitable to the miner as the old system of crushing, which did not appear to have destroyed the fish. By stamping the ores were reduced to so fine a state that a large quantity of mineral was lost, being carried away in the waste water. This would probably explain why the fish were destroyed. But he mentioned these things for the purpose of exciting discussion, which would, no doubt, lead to a gratifying result. Another way of remedying the evil was in the more frequent use of the cesspool or tank, where the mineral water was kept long enough for the lead to subside. They were comparatively inexpensive, and miners could not object to their use. He was, however, glad to find that the lead mines had not, so far, done the slightest injury to the Tivy." The spirit in which these remarks were made is most commendable, and they are such as those who know Mr. Ffennell would expect from him. But the far-seeing policy of the Inspector must not be mistaken. It would be a great misfortune to Wales if the mining prospects were destroyed by an enactment for the preservation of salmon and trout, which no doubt are a source of industry, for thousands earn a livelihood by fishing our rivers and estuaries, but it cannot for a moment compare with the mineral produce of the country. We will not, however, place the two in antagonism. The points raised by Mr. Ffennell we submit to our practical readers, and we open our columns to a free discussion of them, feeling assured that if any provisions hostile to mining creep into the amended Act the fault will rest entirely with the mining interests.

MINING STATISTICS.—The eleventh Annual Table of Statistics of the Dividend Paying Mines, by Mr. W. H. Cueli, was published in a Supplemental Sheet with the *Mining Journal* of Jan. 18. In an excellently arranged table, which could be printed upon a page of letter paper, Mr. Cueli has succeeded in compressing an amount of information of the utmost value to capitalists, investors, and speculators, as a careful perusal of the tables would at all times enable the investment to be made upon the most advantageous terms. The table shows not only the mines that are paying regular dividends, but also the amount subscribed by the shareholders, and dividends returned; and in addition to this, indicates the locality in which the mine is situate, the metal produced, the name and address of the person by whom the management is conducted, the legal constitution of the company, the amount of dues paid, and much useful information.

CARDIGAN CONSOLS.—The most favourable opinions continue to be entertained of these mines, which, with adequate capital and good management, it is confidently believed can be made largely productive and profitable.

ST. JUST UNITED MINES.—We have ascertained from the office that applications for shares in this company have been numerous, that the subscription list will be closed in a few days, and the allotments made. Many of the applications are from parties of high standing in the county of Cornwall. It appears that considerable excitement has been created in the locality by the re-opening of these mines, which the old miners in the district hold in high estimation, and of which they predict extraordinary success for the proprietors and abundance of employment for the miners in the neighbourhood. When these mines were formerly worked they employed a larger number of miners and labourers than all the other mines in the district.

THE LLANMORLAIS COLLIERY COMPANY.—The directors have much pleasure in announcing that in the last report of the operations at the colliery, the seams have proved so valuable, and the quality of the coal so superior, that Mr. Rosser was at once instructed to prepare estimates and surveys for the construction of a railway and shipping place on the River Loughor, as referred to in his report, which he has since done, and made the cost to be 2551*l.* 11s.; this will enable the company to ship 300 tons per day, and accommodate vessels of 500 tons burthen, making the cost of shipping not to exceed 3d. per ton. Respectable contractors will undertake to execute the works in three months, the distance being somewhat under a mile. Under these favourable circumstances, with the large demand for this coal, the directors have every confidence that they will be able to declare a most satisfactory dividend at the end of the current year. —[We understand that the list of applications will close on the 13th inst.]

GEOLOGICAL SOCIETY OF LONDON.—Jan. 22: (Sir R. I. Murchison V.P.G.S., in the chair)—Messrs. Samuel Sharp, Dallington Hall, near Northampton and George P. Wall, the Hills, near Sheffield, were elected fellows, and Senor Casciano di Prado, of Madrid, was elected a foreign member of the society. The following communications were read:—1. "On some Flint Arrow-heads (?) from near Baggy Point, North Devon," by N. Whitley, communicated by J. S. Enys, F.G.S.—2. "On some further discoveries of Flint Implements in the Gravel near Bedford," by James Wyatt, F.G.S.—3. "On a Hyæna Den at Wookey Hole, near Wells, Somerset," by W. Boyd Dawkins, F.G.S. At the next meeting of the Society, on Wednesday, the following papers will be read:—"On Isodiametric Lines as means of representing the Distribution of Ordinary Sedimentary as distinguished from Calcareous Strata, with special reference to the Carboniferous Rocks of Great Britain," by E. Hull, F.G.S.—2. "On the Recent Eruption of Vesuvius," by M. P. de Tchihatcheff: communicated by Sir R. I. Murchison, V.P.G.S.—3. "On some Volcanic Phenomena observed at Torre del Greco," by Sign. L. Palmieri: from the Foreign Office.

CORADINE'S SHEET METAL SPLITTING MACHINE.—At the Institution of Engineers in Scotland, a model of this machine was exhibited by the Blochairn Iron Company, and the secretary described its action, explaining that the features of improvement comprised in it were the provisions for dividing a sheet into two or more parallel strips at once, and the contrivances permitting of the easy adjustment of the parts for cutting different widths. The cutters consisted of square-edged steel rings, mounted upon two parallel shafts, and working slightly past each other—the rotation of the shafts causing the cutting rings to draw the sheet through whilst cutting it. The machine, which was of very small size, was shown in action, cutting sheet iron, of about 18-wire gauge, into three strips at once—the strips being delivered with square clean cut edges, and without twist.

The DEEPEST MINES IN ENGLAND are the Astley Deep Pits, near Dukinfield, which are 686½ yards in perpendicular depth.

The Mining Market; Prices of Metals, Ores, &c.

METAL MARKET—LONDON, January 31, 1862.

COPPER.	£ s. d.	
Best selected....p. ton	110 10 0-	—
Tough cake..... „	107 10 0-	—
Tile ..... „	107 10 0-	—
Burra Burra .... „	100 10 0-	—
Copiapo ..... „	— - -	
Copper wire .....p. lb.	0 1 2 -	—
ditto tubes ..... „	0 1 2 -	—
Sheathing & bolts .. „	0 1 0 -	—
Bottoms ..... „	0 1 1 -	—
Old (Exchange) .... „	0 0 10¼-	—
IRON.	Per Ton.	
Bars, Welsh, in London..	6 5 0-	—
Ditto, to arrive	5 17 6- 6 0 0	
Nail rods	7 0 0-	—
„ Stafford. in London	7 0 0- 7 10 0	
Bars ditto	7 5 0- 8 0 0	
Hoops ditto	8 10 0- 9 0 0	
Sheets, single	9 0 0- 9 10 0	
Pig, No. 1, in Wales ..	3 0 0- 4 0 0	
Refined metal, ditto....	4 0 0- 5 0 0	
Bars, common, ditto....	5 0 0-	—
Ditto, merchant, in Tees	6 10 0-	—
Ditto, railway, in Wales	5 0 0- 5 2 6	
Ditto, Swed. in London.	11 10 0-12 0 0	
To arrive	11 0 0-11 10 0	
Pig, No. 1, in Clyde....	2 8 0- 2 18 0	
Ditto, f. o. b. in Tees ..	— - -	
Ditto, forge, f.o.b. in Tees	— - -	
Staffordshire Forge Pig.	3 10 0- 3 12 6	
Welsh Forge Pig	— - -	
LEAD.		
English Pig	20 10 0-21 10 0	
Ditto sheet	21 0 0-21 5 0	
Ditto red lead	22 10 0-	—
Ditto white	28 10 0-30 0 0	
Ditto patent shot	22 10 0-23 0 0	
Spanish	19 10 0-19 15 0	

* At the works, 1s. to 1s. 6d. per box less.

BRASS.	Per. lb.
Sheets	10d.-11d.
Wire	10¼d.- —
Tubes	10¾d.-11¾d.
FOREIGN STEEL.	Per Ton.
Swedish, in kegs (rolled)	— - -
„ (hammered).	16 10 0-17 0 0
Ditto, in faggots	17 10 0-18 0 0
English, Spring	18 0 0-23 0 0
Bessemer's, Engineers Teel	44 0 0- —
„ Spindle	30 0 0- —
QUICKSILVER	7 0 0 p. bottle
SPELTER.	Per Ton.
Foreign	18 5 0- —
To arrive	18 0 0-18 10 0
ZINC.	
In sheets	23 0 0- —
TIN.	
English, blocks 120	0 0- —
Ditto, Bars (in barrels)..121	0 0- —
Ditto, Refined 122	0 0- —
Banca 124	0 0- —
Straits 119	0 0-120 0 0
TIN-PLATES.*	
IC Charcoal, 1st qua. p. bx.	1 8 0- 1 9 0
IX Ditto 1st quality „	1 14 0- 1 15 0
IC Ditto 2d quality „	1 4 6- 1 6 6
IX Ditto 2d quality „	1 11 0- 1 13 0
IC Coke ..... „	1 2 0- 1 2 6
IX Ditto..... „	1 8 0- 1 8 6
Canada plates ....p. ton	12 10 0-13 0 0
In London; 20s. less at the works.	
Yellow Metal Sheathing	p. lb. 10d.
Indian Charcoal Pigs in London	6 12 6- 6 15 0

REMARKS.—Owing to the great quietude which has of late been manifested in the Metal Market sellers have found it difficult to make sales without, from time to time, conceding in price. During the past week buyers have to some extent taken advantage of the reduced rates, and a large business has been done, chiefly in the realisation of speculative second-hand parcels, which will relieve the market, and probably exercise a beneficial influence, by enabling holders now to maintain a firmer position.

COPPER.—In English descriptions no alteration in fixed rates has been made, though for some time past they have been merely nominal, underselling having become general. In the course of the past week several extensive sales of manufactured have taken place, the average rates at which such business has been transacted being 1d. to 1¼d. under price, or 10¾d. to 11d. per lb. Cake and tile is less enquired for, and is also to be purchased much under fixed rates. Foreign is slow of sale—Burra Burra very difficult to move, offered to day at 100*l.*; Kapunda, 100*l.*; Chilli, 90*l.*, in Liverpool. Spanish, 89*l.* to 90*l.*

YELLOW METAL in limited request for shipment, orders mostly for small quantities; selling price not above 9d. to 9¼d. per lb.

IRON.—No improvement can be reported in railway bars—prices remain without alteration. Merchant bars are in good ordinary demand—quotations unaltered. So long as railway orders remain scarce it is not likely that any material advance can be made in prices, however good the demand may be, and though the present prices—5*l.* 2s. 6d. to 5*l.* 5s. at the works, and 6*l.* f.o.b. in London—are stated to be unremunerative, there are plenty eager to take the orders that come into the market. On the other hand, a marked improvement in rails would most probably cause a considerable advance in merchant bars. For Staffordshire makes there is rather more enquiry, principally confined to best brands; inferior qualities being still very difficult to dispose of, buyers taking advantage of the present exigencies of manufacturers are enabled to arrange easy terms of purchase. Swedish bars do not exhibit any activity, and quotations remain without material alteration. Scotch pigs have advanced during the week about 1s.; the market closes to day at 49s. 3d., mixed numbers.

LEAD.—An improved feeling is manifested in the market for English pig, and sellers have been able to command slightly advanced rates. There is a fair enquiry for consumption. Shipping orders are somewhat limited, present price 20*l.* 10s. for ordinary soft quality, and 21*l.* 7s. 6d. to 21*l.* 10s. for WB. Sheets, shot, and bars in middling request at quotations. Spanish pig, 19*l.* 10s. to 19*l.* 15s.

SPELTER.—During the past week large sales are reported to have been made in this metal, partly for American account, at about 18*l.* cash, which, according to the present doubtful prospects of the market, and the heavy stocks in warehouse here, is certainly the full intrinsic value of the article, but the spelter market being a very favourite medium for speculation, no dependence can be placed on the steadiness of prices for any length of time. There are sellers now at 18*l.* 5s. The demand for shipment is anything but large. ZINC steady at 23*l.*

TIN.—The price of English has undergone no alteration, although in comparison with foreign it is 3*l.* or 4*l.* below the average difference. The demand continues steady. Foreign hangs rather heavily on the market. Banca has declined in Holland to 73 fl., and can be bought in warehouse here at 124*l.* Fine Straits, 120*l.* three months, 119*l.* cash.

TIN-PLATES.—No material alteration to note either in price or demand.

STEEL.—Since the large contracts made for spring shipment in Swedish keg and faggot prices have become firmer—16*l.* 10s. for keg, ex warehouse; 17*l.* 10s. faggot.

NEW YORK, JAN. 13.—Political and commercial disaster and fiscal change have, in the United States, characterised the year 1861; and although its close is marked with many signs of promise for the future, yet in respect of an accumulating national debt, the means to be adopted to meet its requirements, the suspension of specie payments, and an apprehended inflation of the currency, the course of business events during the year 1862 is difficult to anticipate, and certainly even the ripest experience must grope for a time through the incertitude of its developments. Misapprehensions, political antipathies and jealousies, and supposed commercial and popular expediency in Europe, have jeopardised our foreign relations likewise; and, however innocent the United States may be of exciting them, our domestic troubles may be enhanced by the calamities of a foreign war of aggression. Yet the exhaustless energies and resources of the country would be ready, if necessary, to meet even this last emergency; for the vast development during the last 25 years of our manufacturing and industrial affairs, and the constant increase of capital, machinery, and labour, resulting therefrom, make the United States in all the essentials of peace or war independent; and it is in crises like this now threatening the existence of the Republic that the wisdom, the benefit, and the patriotism of our protective or tariff system are demonstrated by its incalculably great and practical national results. This policy, whose advocates have been so long and shrewdly denounced by the statesmen and manufacturers of another and an antagonistic country, has called into existence, and fostered into a prolific and stalwart life, American mechanical industry and capital, now providing the land with its ships, machinery, and implements of war, food, and raiment—what would the position of the United States now be, if free trade had been allowed to banish the engineer, the inventor, the artizan, and the manufacturer from its borders? These facts, together with the necessities of Government and people, the revealments of transatlantic antipathies and policy, and the accord of public opinion here, will for the next twenty-five years largely influence our commercial legislation; after which time the manufacturers of this country will compete in all respects with those of older nations, now deriving the advantages that protection and prohibition afforded their manufactures in their early existence. Speculation in metals has been active during the past two months, and, as it is well sustained and the enquiry active, prices in some cases have reached high figures, while others are rapidly following. The suspension of specie payments, and an increase of our paper currency, are, with the gradual revival of business, the exciting causes of these advances. The advance in copper, together with the improved production and prospects in the Lake Superior Mines, has caused a large investment and advance in the mining adventurers of that region.

The bar, sheet, and other domestic manufactured iron trade has, during the past few years, made immense progress; and Philadelphia houses, aware of its present and future importance, have made great and successful efforts to secure it, by the investment of the necessary capital, careful attention, and proper efforts. The importance to New York of securing a portion of this trade cannot be overrated, for the American irons are gradually and surely supplanting the foreign article, and must soon drive it almost entirely out of our market. The New York trade generally complain of a lack of uniformity in the American article, and a prejudice against it on the part of the consumer. Precisely the same objections were made to American pig-irons when they were first brought on the market in competition with Scotch; but these prejudices were overcome in the course of a few seasons, and they were found—as soon as foundrymen understood their use—to be superior to the Scotch irons, and at least 10 tons of American foundry pig-iron sell now to 1 ton of Scotch. The use of these irons, and the convenience of getting them, has aided more largely than any thing else in building up the enormous hollow ware, stove, and other light castings trade of New York, the Valley of the Hudson, Philadelphia, and elsewhere. Irons of American manufacture will surely command our markets; if the New York trade neglect them, and avoid the first trouble of their introduction, Philadelphia will carry off the whole trade.

IRON-CLAD WAR SHIPS.—Congress having authorised the construction of 20 iron-clad vessels, it becomes a matter of interesting enquiry where they are to be built, and where the 14,000 tons of iron plate required to incase them with are to come from? So far as the construction of the wooden hulls is concerned, there will be no difficulty in getting the whole built in New York and its vicinity, within the next six months; but the incasement of them with plates of iron, of the description required by Government specifications, is quite a different thing, there not being at the present time a rolling mill in the country prepared to furnish the plates. Even in England there is only one mill capable of turning out plates of the requisite size and thickness, and that mill is at present fully occupied in executing orders of the British Government. Under these circumstances, it becomes necessary for the Federal Government either to establish a rolling mill of the requisite capacity, or grant an appropriation to the Trenton Iron Company, New Jersey, or the Phœnix Iron Company of Phœnixville, to enlarge their capacities sufficiently to enable them to execute the work. In the course of five or six months either of them would, in all probability, be prepared to commence rolling the plates, by which time the shipbuilders would have the vessels ready to be incased in their shot-proof coverings. THOS. J. PEET.

Notwithstanding that a very heavy fortnightly settlement has again interfered with business in the MINING SHARE MARKET, large transactions have taken place, and there is a good and continuous demand for dividend and progressive mines on the part of the investing public, and a deal of speculation on the market; consequently prices are in most cases firm, and have an upward tendency. East Caradon shares have been very largely dealt in, and leave off 29¾ to 30; the latest report values the 50 east at 85*l.* per fm.; this end has now been a continuous course of ore for 130 fms. long, a thing almost unparalleled in mining; the 60 east is worth 45*l.* to 50*l.* per fm.; the 60 east, on Fawcett's lode, is worth 12*l.* per fm.; the new lode, in the 60 east, is worth 10*l.* per fm.; the 60 west is worth 20*l.* per fathom. Marke Valley shares also largely dealt in, at 10 to 10¼. South Frances, 110 to 115; one of the suits between this mine and West Basset, so frequently deferred, came on for hearing on Wednesday, and the former company have obtained a rule absolute for a new trial, after they have appealed to the Exchequer Chamber. At its commencement the dispute in reference to the boundary between these two mines was one of the simplest character, but through the ingenuity of the law it has become one of the most complicated; and it is almost impossible to understand, much less to explain, its various ramifications. According to the reports of the trial this last action was originally one of trespass, brought by West Basset against South Frances, for damages in taking copper ore from West Basset; and at the trial in Cornwall a verdict was given against South Frances Company, but they afterwards obtained a rule *nisi* for a new trial. In the meantime the other action in regard to the boundary question went on, and the South Frances obtaining a verdict; the West Basset entered an appeal to the House of Lords, which they afterwards withdrew, and then opposed the application on the part of South Frances for a new trial in the case of trespass. In this it will be seen they have not been successful, but the terms upon which the new trial has been granted to South Frances are considered favourable to West Basset; and further heavy legal expenses are now inevitable, unless the shareholders are determined enough on both sides to force their respective managers into some compromise, and so put an end to these seemingly interminable suits; from which, however this may end, the lawyers will be the greatest, if not the only, gainers. It may not be generally known, besides, that in whatever way the boundary question may be settled, the lode, from its underlie, is beyond dispute in the South Frances sett at 63 fathoms deep.

East Basset shares have rather improved during the week, and leave off 50 to 52 ex div.; at the meeting, on Tuesday, the accounts showed a profit of 1325*l.* 5s. 8d. on the two months, and a dividend of 1536*l.*, or 3*l.* per share, was declared, leaving 945*l.* 4s. 10d. to credit of next account. The sales of ore for the two months realised 2324*l.* 11s. 6d. The last sale of ore, in January, to come into next account, realised 603*l.* only. The end in the mine are of no value at present, but an improvement is hoped for in the 90, east of new shaft. The stopes are worth in the aggregate 21*l.* per fathom. Condurrow, 60 to 62½. South Caradon, 320 to 325; at the meeting a dividend of 5*l.* per share was declared. West Seton shares continue in demand, at 290 to 300. Wheal Basset shares have advanced to 100, 105; the dividend next week will probably be 3*l.* per share. East Carn Brea shares have been firm, and a very large business transacted; shares leave off 10⅞ to 10¾; an improvement has taken place in the mine, and the 50 west is now worth 4 tons of ore per fathom. The 40 east, same distance behind the winze below the 26, is worth 4 tons per fm.; the winze below the 26, 4 tons per fm.; the 26 east, 2 tons per fm. Dec. Great Consols have advanced to 390, 400, and a good demand for shares. Rosewall Hill and Ransom United have been in good demand, at 3⅛ to 3¼, leaving off 3⅛ to 3¼; the lode has been cut in the 115, west of Ransom's shaft, 6 ft. wide, producing some rich work for tin, but not yet out of the influence of the cross-course. Providence Mines rather more quiet at 44 to 46. Wheal Grylls, 14¼ to 14¾. North Roskear shares have been very largely dealt in, and the price again advanced to 26, leaving off 25 to 26. We hear there is an improvement in the copper lode, but have no particulars. Carn Brea, 75 to 80. Carn Camborne shares have been in good request, and leave off 13s. to 15s. Cook's Kitchen, 29 to 30. Caradon Consols, 10 to 11; Drake Walls, 20s. 22s. 6d.; East Gunnis Lane and South Bedford, 9s. to 11s. South Tolgus, 53 to 55, ex div.; at the meeting a dividend of 1*l.* per share was declared, and the mine is reported to be looking better than it has been for twelve months previous. East Russell, 2¼ to 2½; East Wheal Grenville, 24s. to 26s.; Grambler and St. Aubyn, 15½ to 16½; Great Retallack, 12s. to 14s.; Great Wheal Fortune, 12½ to 13½; Herodsfoot, 39 to 40. New Seton shares have further advanced to 62½, 67½. North Basset shares have been in demand, and have advanced to 4, leaving off 3¾ to 4; the south part of lode in the the 92 is producing from 1½ to 2 tons of copper ore per fm. Great South Tolgus, 3⅜, to 4; the lode at Lyle's shaft is producing tinstuff worth 20*l.* per fm. The 12 west of Lyle's, has much improved, and worth 3 tons per fathom. North Crofty, 35s. to 37s. 6d.; North Minera, 16s. to 17s.; North Robert, 18s. to 20s.; North Treskerby, 23½, 24½, and not quite so firm; Sortridge Consols, 10s. to 11s.; Stray Park, 30 to 31. Tincroft shares have advanced to 8⅜, 8½; Treloweth, 30s. to 32s. 6d. Wheal Margaret firm, at 44 to 46. Trencrom shares have advanced to 3¼, 3½, with mine improving; a short time ago the shares were offered at about 5s. each, and unsaleable. Wheal Condron Consols, 12 to 13. West Basset, 13 to 14, and better since the trial, which is looked upon as a triumph by the shareholders. West Caradon, 43 to 44; West Frances, 9 to 10; West Polmear, 5s. to 7s. 6d.; Wheal Rose Down, 14 to 15. Wheal Clifford Amalgamated, 30 to 32, and firmer. Wheal Grenville, 30s. to 32s. 6d. Wheal Kitty (Lelant) have advanced to 9½, 10. Wheal Ludcott, 2½ to 2¾; Wheal Mary Ann, 16 to 16½. Wheal Seton shares have again advanced to 125, 127½. Wheal Treleweth, 18½ to 19½; Wheal Unity, 11s. to 13s. Wheal Uny shares not quite so firm, at 5⅛ to 5⅞. Wheal Union, 2 to 2¼. North Downs rose on Thursday from 5½ to 5¾, 6, and leave off 5⅞ to 5¾; the lode has been cut into in the 60, but not much seen of it at present. The sale of ore on Thursday realised 2029*l.* 11s. 6d. Prosper United, 1¾ to 2; the lode in the 40, east of Louisa's shaft, has improved, being now 3½ ft. wide, yielding stamping work for tin; the lode at Hill's shaft, sinking below the 30, is 5 ft. wide, worth 50*l.* per fm.; the 20, west of this shaft, is worth 25*l.* per fm.; the 30, west of Henry's shaft, the same value as last week. They have shipped 106 tons of copper ore, which we hope is the commencement of regular sales of larger magnitude. When the steam-stamps are at work they ought also to be good parcels of tin.

On the Stock Exchange business in Mining Shares has been very active during the week. The following prices were officially recorded in British Mining Shares:—East Caradon, 29½, 29¾, 30; East Carn Brea, 10⅞, 10⅞, 11; Mwyndy, 2¼; North Wheal Basset, 3⅞, 4, 3⅞, 3¾; Tamar, 1⅛, 1⅜; West Seton, 295; Wheal Kitty, 9, 8½; Great South Tolgus, 3⅞, 3⅝; West Caradon, 44½; Providence, 44½; Marke Valley, 10¼; North Downs, 5¼, 5⅜; South Wheal Frances, 113; Stray Park, 30½; Wheal Basset, 101; Clifford, 30, 30¾; North Wheal Crofty, 2. In Colonial Mining Shares the prices were:—Dun Mountain, 1, 1½; Great Northern Copper of South Australia, 1½, 1⅝, 1½, 1⅝; Scottish Australian, 1½, 1⅝, 1½; Bon Accord, ⅝; General, 23½; Port Phillip, 1⅜, 1½, 1⅜; Worthing, ½; Kapunda, 2½. In Foreign Mining Shares the prices were:—Cobre, 34¼, 34½, 35; United Mexican, 8¾, 9, 9¼, 9, 9⅜, 9, 9¼, 9, 9¼, 8⅞, 9½; East del Rey, 1⅜, 1½, 1⅜, 1½; St. John del Rey, 64½, 65½, 64¾; Fortuna, 2½.

The closing quotations for shares in new undertakings were:—Ocean Marine Insurance, 6, 6½ prem.; Thames and Mersey Marine, 1¼, 1⅜ prem.; Universal Marine Insurance, 1¼, 1⅜ dis.; London and Provincial Marine, ⅛ dis., ¼ prem.; Mercantile Fire, ¼, ⅜ prem.; Commercial Union, ⅛ dis. to par. Transactions have also taken place in London and Scottish of Ireland Direct Telegraph Company at ¼, ⅜ prem., firm; the list closes on Monday next for London, on Wednesday for Ireland. Santa Barbara, ¼, ½ prem.; Warmley Colliery and Spelter Works, ¼, ⅜ prem.; Cardigan Consols, ¼, ½ prem.; Capula, ⅛, ⅜ prem.; and Amman Colliery, 1¼ prem.

MINING EXCHANGE SHARE LIST.—The following is forwarded to us officially from the Mining Exchange as business done during the week:—

SATURDAY, JAN. 25.—Wheal Arthur, 16s; North Basset, 2 13-16ths, 3 1-16th; Trelawny, 18½; Hawkmoor, ⅛; West Caradon, 44¼; Grenville, 30s; North Roskear, 23, 22¾; Seton, 124; Stray Park, 30½; Providence, 44, 45.

MONDAY.—Trelawny, 19; Cook's Kitchen, 29¼; Rosewall Hill, 3⅜, ½; East Carn Brea, 10⅞, 15-16ths, 11, 10⅞, 11; East Caradon, 29½, ⅜, ½; Trencrom, ⅜, ½;

Frances, 11s; Uny, 5 13-16ths; North Basset, 3⅛, ¼; Tincroft, 8, ⅛; Unity, 12s; East Russell, 2l 11s 3d.

TUESDAY.—North Basset, 3l 6s 9d; Uny, 5¾, ⅞; East Caradon, 29¾; Seton, 125⅛; Ludcott, 2⅛; North Roskear, 23⅞; Rosewall Hill, 3⅛; North Downs, 5¼; East Carn Brea, 10¾; Trelawny, 18⅛.

WEDNESDAY.—East Carn Brea, 10⅝; Tamar, 1¾; Trelawny, 19¾, 19; North Basset, 3⅞; West Caradon, 44; East Caradon, 29⅛; Great South Tolgus, 4.

THURSDAY.—Marke Valley, 9l 19s; Kitty (Lelant), 9⅛; North Basset, 4, 3 15-16ths; Basset, 102; Tincroft, 8⅜; East Carn Brea, 10¾, 16s; North Downs, 5¼, ¾, 16s; Santa Barbara, ⅜, ¼, prem.; North Roskear, 25.

FRIDAY.—Ludcott, 2⅛; North Treskerby, 24; Basset, 104, 105; West Caradon, 44; North Robert, 19s; North Roskear, 24¾.

IRISH MINE SHARE MARKET.—This has been rather active during the week, and prices have experienced frequent fluctuations, exclusively regulated by supply and demand, as nothing has transpired affecting the present or prospective value of the several mines in which shares have changed hands. Wicklow Copper Mining Company shares rose from 54*l*. 7s. 6d. to 55*l*., and have again receded to 54*l*. 5s., leaving off sellers at a slight reduction on last week's quotation. Mining Company of Ireland shares were more steady, and are in request at 16*l*. 5s., ex. div., an advance of 5s. per share. General Mining Company for Ireland shares are offered at 5*l*. 7s. 6d., and takers at 5*l*. 5s. Connorree shares are on sale and weak, at 31s. 6d. Carysfort shares can be obtained at 7s. 6d., or a reduction of 6d. in the price last reported. Some surprise is expresssed that your active and intelligent correspondent, Nicholas Ennor, has nothing to communicate to the Journal on what he has seen on his recent visit to Ireland.

At Redruth Ticketing, on Thursday, 4404 tons of ore were sold, realising 23,002*l*. 13s. The particulars of the sale were—Average standard, 12*l*. 1s.; average produce, 6⅛; average price per ton, 5*l*. 4s. 6d.; quantity of fine copper, 272 tons 1 cwt. The following are the particulars:—

Date.	Tons.	Standard.	Produce.	Price per ton.	Ore copper.
Dec. 26	3001	£132 7 0	5¾	£4 16 0	£84 8 0
Jan. 2	2988	128 1 0	7	6 6 0	88 8 0
„ 9	2582	129 18 0	6¾	6 1 6	89 8 0
„ 23	5296	135 8 0	5⅝	4 10 6	84 5 0
„ 30	4004	129 1 0	6⅝	5 4 6	84 10 0

Compared with the sale of last week, the decline has been in the standard 20s., and in the price per ton of ore about 1s. 3d. Compared with the corresponding sale of last month the decline has been in the standard 18s., and in the price per ton of ore about 1s. 2d.

The following dividends have been declared during January:—

Mine.	Per share.	Amount.
Devon Great Consols	£8 0 0	£8192 0 0
East Caradon	0 15 0	4608 0 0
Vigra and Clogau	0 15 0	3150 0 0
South Caradon	5 0 0	2560 0 0
Marke Valley	0 6 0	2000 0 0
Carn Brea	1 0 0	2000 0 0
East Basset	3 0 0	1536 0 0
West Fowey	0 17 0	960 0 0
Great Wheal Fortune	0 10 0	899 0 0
Cook's Kitchen	0 7 0	857 10 0
Cwm Erfin	0 15 0	650 5 0
Wheal Jane	1 0 0	512 0 0
Cwmystwith	4 0 0	512 0 0
Copper Hill	2 0 0	512 0 0
South Tolgus	1 0 0	512 0 0
South Frances	1 0 0	496 0 0
Craddock Moor	0 7 0	369 5 0
Orsedd	0 0 4	80 0 0
Cobre	1 0 0	12000 0 0
Port Phillip	0 1 6	7500 0 0
Total		£49906 0 0

At South Caradon Mine meeting, on Tuesday (Mr. R. Kittow in the chair), the accounts for the two months ending October showed—Balance last audit, 3040*l*. 3s. 6d.; copper ore sold, 9122*l*. 12s. 5d.=12,162*l*. 15s. 11d.—Mine cost, merchants' bills, and sundries, Sept., 3138*l*. 14s. 4d.; Oct., 3186*l*. 2s. 5d.: leaving credit balance, 5840*l*. 19s. 2d. The profit on the two months' working was 2800*l*. 15s. 8d. A dividend and bonus together 2560*l*. (5*l*. per share) were declared, and 3280*l*. 19s. 2d. carried to credit of next account. Capt. Peter Clymo reported—"The new discovery alluded to in my last report has failed, the lode at present being unproductive, but still a very promising one, and I think we must go deeper before we have much ore. This level is called the 100, but it is not, in fact, so deep as the East Caradon 50 fm. level. The other parts of the mine are still looking very well, with every probability of a continuance."

At East Wheal Basset meeting, on Tuesday, the accounts showed—Balance last audit, 1155*l*. 19s. 2d.; ore sold, &c., 2482*l*. 2s.=3638*l*. 1s. 2d.—Mine cost, merchants' bills, and sundries, 1156*l*. 16s. 4d.: leaving credit balance, 2481*l*. 4s. 10d. A dividend of 1536*l*. (3*l*. per share) was declarad, and 945*l*. 4s. 10d. carried to credit of next account.

At the Carn Brea Mining Company meeting, yesterday, the directors declared their 112th dividend, of 2*l*. per share—making the sum of 271*l*. 10s. already paid on each 15*l*. share.

At the Copper Hill Mine meeting, on Tuesday, the accounts for the four months ending December showed—Ores sold (deducting 209*l*. 12s. dues, at 1-16th), 3144*l*. 0s. 5d.; sundries, 29*l*. 4s. 4d.=3173*l*. 4s. 9d.—Balance last audit, 403*l*. 17s. 2d.; mine cost, merchants' bills, and sundries, 2013*l*. 1s. 8d.: leaving credit balance, 756*l*. 5s. 11d. The profit on the four months' working was 1160*l*. 8s. 1d. A dividend of 512*l*. (2*l*. per share) was declared, and 244*l*. 5s. 11d. carried to credit of next account. Captains J. Davey and Son, Inch, and Johns reported upon the various points of operation.

At the South Tolgus Mine meeting, on Tuesday, the accounts for Nov. and Dec. showed—Balance from last audit, 68*l*. 1s. 9d.; ore sold, 2753*l*. 10s. 9d.=2821*l*. 12s. 6d.—Mine cost, merchants' bills, and sundries, 2267*l*. 1s. 3d.: leaving credit balance, 554*l*. 11s. 3d. The profit on the two months' working was 486*l*. 9s. 6d. A dividend of 512*l*. (1*l*. per share) was declared, and 42*l*. 11s. 3d. carried to the credit of the next account.

At Great Wheal Fortune meeting, on Jan. 22, a dividend of 10s. per share was declared, and a balance of upwards of 900*l*. in favour of adventurers carried to next account. The report of the agents was an exceedingly satisfactory one.

At Craddock Moor Mine meeting, on Tuesday, the accounts for Sept. and Oct. showed—Balance last audit, 1584*l*. 11s. 1d.; copper ores sold and carriage, 2420*l*. 1s. 4d.=4004*l*. 12s. 5d.—Mine cost, merchants' bills, and sundries, 1926*l*. 17s. 9d.; November dividend, 369*l*. 5s.: leaving credit balance, 1708*l*. 9s. 8d. The profit on the two months' working was 493*l*. 3s. 7d. A dividend of 369*l*. 5s. (7s. per share) was declared. Capts. H. and J. Taylor and Phillips reported on the points of operation. They estimate to sell 300 tons of usual quality copper ore in the next two months.

At the Alfred Consols Mine meeting, on Monday, the accounts for Sept. and Oct. showed—Balance last audit, 279*l*. 11s. 2d.; mine cost, merchants' bills, and sundries, 1891*l*. 7s. 10d.=2170*l*. 19s.—Copper ore sold, 1495*l*. 8s. 8d.: leaving a debit balance of 675*l*. 10s. 4d.

At the Pedn-an-drea United Mines quarterly meeting, on Wednesday (Mr. Robt. Pulsford in the chair), the accounts showed—Credit balance last audit, 3546*l*. 17s. 9d.; tin sold since last meeting, 2955*l*. 19s. 9d.; copper ore, 279*l*. 3s. 9d.; arsenic, 55*l*. 10s.; calls received, 1721*l*. 12s. 10d.=6559*l*. 4s. 1d.—Sept., Oct., and Nov. labour cost, 3178*l*. 3s. 2d.; merchants' bills, &c., 2199*l*. 11s. 8d.: leaving balance in hand, 1181*l*. 9s. 3d. The agents' report is among the Mining Correspondence.

At Penhalls Mine meeting, on Tuesday (Mr. I. Odell in the chair), the accounts for the three months ending Nov. showed—Balance last audit, 566*l*. 15s. 3d.; mine cost, merchants' bills, and sundries, 1547*l*. 17s. 1d.=2114*l*. 12s. 4d.—Tin sold, 1076*l*. 16s. 3d.: leaving debit balance, 1037*l*. 16s. 1d. A call of 2s. per share was made. Capt. Pryor and Gribble's report was of a favourable character.

At Bedford Consols Mine meeting, on Wednesday (Mr. J. Rowlands in the chair), the accounts for the three months ending Nov. showed—Balance last audit, 9*l*. 3s.; mine cost, merchants' bills, and sundries, 308*l*. 12s. 6d.=317*l*. 15s. 6d.—Calls received, 206*l*. 15s. 1d.: leaving debit balance, 111*l*. 0s. 5d. A call of 1s. per share was made. Capt. J. Mitchell reported that they had 18 or 20 tons of copper ore ready for sampling, which would realise about 45*l*. or 50*l*.

At New Trevenen Mine meeting, on Monday, the accounts showed a debit balance of 429*l*. 15s. 10d. A call of 10s. per share was made.

At North Phœnix Mines meeting, on Jan. 23 (Mr. J. W. Dingle in the chair), the accounts for the four months ending November showed—Balance last audit, 295*l*. 8s. 3d.; calls received, 500*l*.=695*l*. 8s. 3d.—Mine cost, merchants' bills, and sundries, 479*l*. 5s. 5d.: leaving credit balance, 216*l*. 2s. 10d. A call of 2s. 6d. per share was made. Capt. J. Martin reported upon the various points of operation. The cost for the four months ending March next is estimated at 520*l*.

At the Garreg Mine meeting, on Tuesday, the accounts showed a debit balance of 162*l*. 12s. 11d. A call of 2s. 6d. per share was made. A long report from Mr. Jehu Hitchins was read.

At the Merllyn Mine meeting, on Tuesday, the accounts showed a debit balance of 83*l*. 6s. 9d. A call of 1s. per share was made. Fifty shares had become forfeited from non-payment of calls. Mr. Jehu Hitchins, referring to Capt. Wm. Sandoe, says—"Your agent I have from time to time during the past two or three years met at these mines. He is a practical miner, and although he may have erred in not doing what should have advised, I nevertheless think he has generally fair judgment, and is equal to his situation; there are, doubtless, men of more confidence and seeming energy, but believe Capt. Sandoe throws his whole honest energy into the interest of his employers, and is, moreover, attentive to his duties."

At Brynford Hall meeting, on Tuesday (Mr. Hammersley in the chair), the accounts showed a debit balance of 74*l*. 8s. A call of 3*l*. per share was made. A long discussion took place on the future workings of the mines, and it was finally agreed that two practical agents, conversant with the stratification of the country, should be instructed to inspect and report on the same. A large sum during the past six months has been spent in opening up two new mines, and early results are looked for.

At Herward United meeting, on Tuesday, the accounts showed a debit balance of 167*l*. 13s. 2d. A call of 2*l*. per share was made. Considerable returns of lead are being made to assist the cost; and the prospects were considered decidedly hopeful. The same resolution was come to as at Brynford, as to an inspection of the mines.

At Wheal Sidney meeting, on Jan. 22, the accounts for Oct., Nov., and Dec. showed a debit balance of 611*l*. 12s. 3½d.; against which there is at surface from 500*l*. to 700*l*. worth of ore, which, it is believed, can very quickly be stamped and sold. It is supposed that the ore raised in the interval between this and the next general meeting will considerably exceed in value the cost of the corresponding time, which sum it is would be available towards paying for an engine. The advice of a practical mining engineer is to be taken respecting the best size and description of engine. Captain W. Edwards, in his report, says—"We have erected a turbine to assist in stamping, by using the water pumped out of the mine, and which has a fall of 180 ft. This turbine is almost completed, and will be at work within a day or two."

At East Wheal Falmouth meeting, on Monday, the accounts showed a credit balance of 1183*l*. 7s. The secretary was requested to enforce payment of the outstanding calls, now 910*l*. 12s. 6d. Capt. Hancock reported on the mine: "The engine-house walls are up; the loading, stack, and boiler-house will be completed in a week or ten days, if the weather permit, when no time will be lost in getting the engine and pitwork in order to work, so as to sink the engine-shaft as fast as possible, when I hope to send you better reports than heretofore."

At the New Crow Hill Mine meeting, on Wednesday, a call of 2s. per share was made.

At the South Condurrow Mine meeting, on Thursday (Mr. R. Hallett in the chair), the accounts showed a debit balance of 680*l*. 10s. 8d. A call of 3s. per share was made.

At the Michell Mine meeting, on Tuesday, the accounts showed a debit balance of 8*l*. 6s. 2d.: and 600 shares had become forfeited from non-payment of calls. It appearing from the report of Mr. Jehu Hitchins, "that no further explorations can be carried on at the mine without the erection of a steam-engine, to erect which, and sink a shaft about 20 fms., would involve an expenditure of 1000*l*.; and the present meeting feeling that it is not justified in making a call for such purposes without first consulting the general body of the shareholders, it was resolved that the secretary write to all the shareholders, and request them to state whether they will go to the expense of a steam-engine or not; and that this meeting be adjourned until February 7, to take the matter into consideration."

At the Lower Taldrws Slate Company (special) meeting, on Tuesday (Mr. J. Bancks in the chair), the resolution passed at the previous meeting, reducing the number of shareholders necessary to form a quorum to 13, was unanimously confirmed, when it was agreed that the future general meetings should be held upon the second Tuesday in the months of June and December.

At the Consolidated Copper Mines of Cobre Company meeting, on Tuesday (Mr. G. Hibbert in the chair), the report of the directors was unanimously adopted, and a dividend of 12,000*l*. (1*l*. per share) was declared. The financial position of the company has been somewhat affected by accidents to machinery and the low price for ores which has ruled, and also from the produce being a little lower. These, however, are regarded as temporary difficulties only.

At the United Mexican Mining Association half-yearly meeting, on Wednesday (Mr. C. Morris in the chair), the accounts for the quarter ending September showed a profit of $67,796; and a resolution was passed requesting the directors to take the necessary steps for registering the company under the provisions of the Limited Liability Act. Details in another column.

At the Mariquita and New Granada Mining Company meeting, yesterday (Mr. Routh in the chair), it was stated that the Santa Ana Mine presented the most satisfactory appearances—everything promised an abundant supply of ore for a long time to come; and it was the opinion of Mr. Birchall, the company's newly-appointed superintendent, that the amount of the reserves of mineral had been underrated. It was not too much to say that they had now in sight, and fairly estimable as reserves, 125 fathoms of good and mostly very rich mineral ground. The cost returns for the six months ending September showed a profit of $3620 upon the operations at the Santa Ana Mine, and a loss of $7206 upon the Marmato Mine. During the month of October the Santa Ana Mine had produced a profit of $1269. The available balance at the end of September in New Granada amounted to 7379*l*., and the balance in hand in London at the present date was 4100*l*. In addition to which there was to be received 500*l*. for debentures. But there was a balance due to the bankers of 5000*l*.; so that there was a clear available balance on the other side, after paying all expenses, of 7379*l*. to carry on the works at the mines. Therefore, on the whole, the company's financial position would appear to be extremely satisfactory. Since the last meeting General Mosquera had succeeded in forming an effective Government, and everything justified the assumption that it would be permanent and successful. The special meeting, convened for the purpose of electing a director in the place of Mr. Keogh, deceased, was, after a long discussion, adjourned till the annual general meeting. By a pressure of matter the details of the proceedings are unavoidably postponed till our next impression.

At the Dun Mountain Copper Mining Company meeting, on Thursday (Mr. Deputy Corney in the chair), the directors were authorised to raise additional capital to an amount not exceeding 10,000*l*., either by the creation of additional shares or by the issue of bonds, giving, however, a preference to the latter. Details elsewhere.

At the North British Australasian Company annual meeting, on Tuesday (Mr. E. Anderson in the chair), the accounts showed a nett profit on the revenue account of receipts over expenditure of 14,636*l*. 16s. 9d., and of 650*l*. 8s. 4d. on the increase of stock. The balance brought forward of 328*l*. 16s. 8d., added to the nett profit of 14,686*l*. 16s. 9d., amounted to 15,015*l*. 13s. 5d., out of which the directors declared a dividend of 7½ per cent., free of income tax. They had been unable to dispose of any more of the company's principal outlying stations; every exertion had been and would be made to do so, but hitherto no opportunity had occurred. The board thought they might fairly congratulate the shareholders upon the present state of the company. During the year the principal stations had been still further increased in value, by the acquisition of several important blocks of freehold land and the completion of buildings of an extensive character, and notwithstanding the losses resulting from some of the stations, they were enabled to pay an increased dividend for the year. The report and accounts having been unanimously adopted, the dividend declared, and the retiring directors and auditors re-elected, a long discussion ensued upon the advisability of capitalising the company's shares, which resulted in the adoption of a resolution requesting the board to take the matter into consideration. A vote of thanks to the Chairman terminated the proceedings.

At the Scottish Australian Investment Company meeting, yesterday (Mr. Young in the chair), the report, an abstract of which appeared in last week's Journal, was unanimously adopted, and a dividend at the rate of 10 per cent. per annum was declared, which would absorb 10,000*l*., leaving at the credit of the reserve fund 9822*l*.

LEEDS, JAN. 31.—The Mining Market still remains inactive, and very few transactions have taken place; there is, however, rather more enquiry, and a good business may shortly be looked for. The 18 fm. level west, in North Hallenbeagle, still continues to improve.—EDWARD BROOK, 4, Bank-street, Mining Broker.

LEEDS, JAN. 30.—In Mining Shares there has been little business done; there have been many sellers but few buyers, which has had a depressing influence upon the price of most descriptions of stock:—Brea Consols, 20s. to 23s.; Craven Moor, 2s. 6d. to 3s. 6s.; Coniston Out Moor, 2¼ to 2¾; Cornubia, 18s. to 23s.; Hebden Moor, 20s. to 22s.; Merryfield, 7s. to 8s.; North Hallenbeagle, 13s. to 15s.; Nidderdale, par to pm.; North Jane, 40s. to 45s.; West Burton Gill, 100*l*. to 110*l*.; Wensleydale, 7s. to 9s.; Wharfedale, 4s. to 5s.; Woodley Lane, 30s. to 40s.; Yorkshire, 8s. to 10s.

APPLETREEWICK LEAD MINE (near Grassington, Yorkshire).—We have been favoured with a report of this promising mine by Mr. W. Craig, which gives a good description of the underground workings and the producing capabilities of the mine. They have now a great quantity of ore, and have already smelted a good parcel, and expect to pay a dividend during the coming spring.

CONISTON OUT MOOR LEAD MINE.—We are glad in being able to state that this mine continues to improve, which is borne out, not by good promises and favourable indications only, but by practical returns of solid lead. The ore which has been smelted during this month has produced 72 tons of lead, which is considerably more than was anticipated; the calculation being that there would be about 50 tons up to the end of last year. As the mine is further developed there is every appearance of its being more productive.—JOHN GLEDHILL AND CO.

CORNISH PUMPING-ENGINES.—The number of pumping-engines reported this month is 29. They have consumed 2214 tons of coal, and lifted 17·3 million tons of water 10 fms. high. The average duty of the whole is, therefore, 53,200,000 lbs. lifted 1 ft. high by the consumption of 112 lbs. of coal. At Dolcoath, they stop stem times, and the lift has been idle some time. At Carn Brea, a pair of rolls are worked to crush the samples.

COLLIERY ACCIDENTS.—The following is the official return of the number of deaths caused by accidents in the coal mines of South Wales for the year 1861, which, compared with those of the preceding year, show a slight decrease:—

	1860.	1861.
Explosions of gas	26	16
Shafts	12	11
Falls of roof	55	63
Miscellaneous	25=118	20=110

The return is made by Mr. Thomas Evans, the Government Inspector of Coal Mines for South Wales.

COAL MARKET.—On Monday, 19 fresh ships arrived, principally screw steamers with co ntract coals. Honse coals were steady at last week's prices; Hartley's and manufacturers' firmer. Best house coal, 17s. 6d. to 18s.; seconds, 15s. to 16s.; Hartley's, 15s. to 15s. 6d.; manufacturers', 12s. to 14s. —On Wednesday the 13 arrivals were mostly steamers. The quantity of coals offered was extremely small, prices in some instances quoting a little advance, and a clearence effected.—On Friday 38 ships arrived. The tone of business was dull for all descriptions of coal, but no alteration in quotations. Hetton Wallsend, 18s.; Lambton Wallsend, 17s. 6d.; South Hartlepool Wallsend, 16s.; Wharncliffe Wallsend, 15s. 5d. per ton: five cargoes unsold—410 ships at sea.

The subscriptions on the Coal Exchange, for the relief of the sufferers from the accident at Hartley Colliery, already amounts to about 750*l*.

CONTRACT FOR COAL.—The Bombay, Baroda, and Central India Railway require the supply of 3000 tons of steam-coal.

EXPORTS OF COAL.—By the Monthly Circular of Messrs. Laird, we learn that the quantities of coal exported during Dec. was 439,134 tons, against 404,494 tons in the corresponding month of 1860, showing an increase of 34,640 tons. The particulars are—From the Northern ports, 191,558 tons; Yorkshire, 13,307 tons; Liverpool, 46,204 tons; Severn ports, 156,091 tons; and Scotch, 31,974 tons. There was an increase at all the ports except the Yorkshire, where the decrease was 16,831 tons. The total exports from Jan. to Dec. were 7,222,718 tons, against 6,792,848 in the same period of 1860, being an increase of 429,870 tons.

NEW COAL FIELD IN SCOTLAND.—The celebrated "Dunfermline splint" seam of coal has just been discovered in a new pit lately sunk on the estate of Lassodie. The coal is of unusually fine quality; and as the mineral field is extensive, and contains all the other seams of the district besides, the mineral wealth and the railway traffic of the locality will be greatly increased for many years to come. The coal field is opened up by the West of Fife and Edinburgh, Perth, and Dundee Railways, and Charlestown will be the principal shipping port.

AUSTRALIAN COAL.—The local manager announces that the Agricultural Company have entered into their first contract, with the Peninsular and Oriental Company, to supply 10,000 tons from their pits at Newcastle: this, he adds, is an indication that Australian fuel will shortly be exclusively consumed by the steam marine throughout the eastern seas.

Mr. C. S. WOOD, for some time Master of the Bristol Mining School, having received an appointment in connection with the Survey of Otago, New Zealand, for the local Government, delivered a farewell address to the pupils of that institution, last week, "On Geology and the Coal Formations." The lecture was interesting and instructive; and at its conclusion Mr. Wood expressed a hope that amongst those who had received their geological and general scientific education at that institution there might be some who would contribute to the preservation of England's proud position in the scientific world.

LEAD ORES.

Sold on the 24th January.

Mines.	Tons.	Price per ton.	Purchasers.
Laxey	100	£16 19 0	Sims, Willyams, & Co.
Sold on the 25th January.			
Llanfyrnach	40	11 12 0	Sims, Willyams, & Co.
Sold on the 28th January.			
Isle of Man Mining Company	100	20 18 0	—
ditto	24	15 0 6	—
Minera	100	12 12 6	Locke, Blackett, & Co.
ditto	100	12 12 6	ditto
ditto	90	12 12 6	ditto
ditto	80	12 15 6	Panther Co.
Sold on the 30th January.			
Dyliffe	30¼	12 8 6	Adam Eyton.
ditto	30⅛	12 8 6	Walker, Parker, & Co.

BLACK TIN.

Sold on the 1st January.

Mines.	Tons	c.	q.	lbs.	Price per ton.	Amount.	Purchasers.
Gt. Wh. Busy	10	9	1	15	—	£ 626 15	3—Carvedras.
Sold on the 5th January.							
Wh. Tremayne	5	9	1	11	75 12 6	389 8	6—Mellanear.
ditto	5	13	0	17	68 5 0	404 2	9—Treriffe.
Sold on the 25th January.							
Drake Walls	3	5	0	0	71 0 0	—	—Harvey & Co.
ditto	3	5	0	0	71 0 0	—	—Calenick Co.
ditto	6	5	0	0	67 5 0	—	—Enthoven & Sons.
ditto	6	5	0	0	67 5 0	—	—Calenick.
Sold on the 28th January.							
Great Wh. Busy	12	13	2	6	—	764 11	5—Carvedras.
Sold on the mine.							
Bottle Hill	4	15	3	26	67 9 0	321 10	9— —
ditto	0	3	1	17	67 0 0	11 7	11— —
ditto	0	3	1	17	40 0 0	6 16	0— —

COPPER ORES.

Sold at LIVERPOOL, by Mr. James Hallows, on January 28, ex *Hidalgo*.

	Tons.	Price per ton.	Purchasers.
Lot 1	55	£23 15 0	Williams, Foster, & Co.
2	55	23 15 0	ditto
3	55	23 15 0	ditto
4	55	23 15 0	ditto
5	55	22 15 0	ditto
6	55	22 15 0	ditto
7	55	22 15 0	ditto

COPPER ORES.

Sampled Jan. 15, and sold at Tabb's Hotel, Redruth, Jan. 30.

Mines.	Tons.	Price.	Mines.	Tons.	Price.
Great Wheal Busy	95	£1 17 0	North Treskerby	60	£3 10 0
ditto	86	3 0 6	ditto	49	9 13 0
ditto	66	2 15 6	ditto	44	2 13 6
ditto	65	1 10 0	Tywarnhaile	59	1 19 6
ditto	64	2 15 6	ditto	50	2 9 6
ditto	61	1 16 6	ditto	43	2 17 6
ditto	58	2 16 6	ditto	42	2 17 6
ditto	51	2 10 6	ditto	38	4 12 0
ditto	43	3 10 6	ditto	37	1 19 0
ditto	40	2 15 6	ditto	32	7 12 0
ditto	36	6 5 0	North Downs	71	7 6 6
ditto	35	4 2 0	ditto	62	7 15 6
West Caradon	82	9 15 6	ditto	61	10 1 0
ditto	76	6 12 6	ditto	56	7 8 0
ditto	75	6 7 0	Wheal Polmear	76	2 14 6
ditto	73	5 12 0	ditto	51	4 2 6
ditto	68	9 8 6	ditto	48	4 14 6
ditto	55	8 14 0	ditto	45	7 19 0
ditto	53	7 2 0	Craddock Moor	64	7 10 6
ditto	35	1 15 0	ditto	63	7 3 6
Clifford Amalgamated	92	4 17 0	ditto	50	6 8 6
ditto	91	2 15 6	ditto	20	4 0 6
ditto	43	0 13 0	St. Day United	53	3 13 0
ditto	42	2 7 0	ditto	46	5 13 0
ditto	41	4 1 6	ditto	35	2 4 6
ditto	40	2 19 0	ditto	30	1 18 6
ditto	38	0 17 6	East Crinnis	75	5 8 6
ditto	35	1 11 0	ditto	62	4 8 0
ditto	32	0 10 6	South Crinnis	50	4 9 6
ditto	28	3 19 0	ditto	45	4 16 6
ditto	18	3 9 6	Wheal Moyle	60	1 10 6
South Caradon	88	9 16 6	ditto	8	5 18 0
ditto	73	9 7 6	Perran Mines	31	3 1 6
ditto	64	6 3 6	ditto	26	3 9 0
ditto	53	15 2 0	Burra Burra	23	3 7 6
ditto	50	18 10 6	ditto	16	1 15 0
ditto	48	6 6 0	ditto	9	4 14 0
ditto	40	7 3 0	Gonamena	23	6 8 6
Fowey Consols	80	6 8 6	ditto	8	3 19 6
ditto	79	9 12 6	Duchy and Peru	14	1 11 6
ditto	78	5 16 0	East Charlotte	14	2 1 6
ditto	75	6 7 0	Hender's Ore	7	1 18 0
ditto	48	6 12 0	Mines Royal Company	5	4 14 0
North Treskerby	80	3 19 6	Wheal Cupid	3	10 16 0
ditto	69	3 12 0			

TOTAL PRODUCE.

Great Wheal Busy	700	£1929 3 6	E. Crinnis & S. Par	137	£ 679 13 6
West Caradon	517	3747 1 0	South Crinnis	95	440 17 6
Clifford Amal.	500	1387 18 0	Wheal Moyle	68	138 14 0
South Caradon	414	4228 18 6	Perran Mines	57	185 0 6
Fowey Consols	360	2519 16 6	Burra Burra	48	147 18 6
North Treskerby	302	1366 19 0	Gonamena	31	179 11 6
Tywarnhaile	301	974 16 0	Duchy and Peru	14	22 1 0
North Downs	250	2029 11 6	East Wh. Charlotte	14	29 1 0
Wheal Polmear	220	1002 0 6	Hender's Ore	7	13 6 0
Craddock Moor	197	1335 7 6	Mines Royal Co.	5	23 10 0
St. Day United	164	588 19 6	Wheal Cupid	3	32 8 0

Average Standard ..... £129 1 0 | Average Produce 6⅛
Average Price per ton £5 4 6
Quantity of Ore ..... 4404 tons | Quantity of Fine Copper, 272 tons 1 cwt.
Amount of Money £23,002 13 0
LAST SALE.—Average Standard ..... £135 8 0.—Average Produce 5⅞
Standard of corresponding sale last month, £132 7 0.—Produce, 5¾.

COMPANIES BY WHOM THE ORES WERE PURCHASED.

	Tons.	Amount.
Vivian and Sons	323 3½	£1627 10 9
Freeman and Co.	417 1¾	3133 10 9
Grenfell and Sons	416	2480 7 0
Crown Copper Company	75¾	523 11 8
Sims, Willyams, and Co.	397	1963 2 6
Williams, Foster, and Co.	740 1¾	5057 11 10
Mason and Elkington	619¼	3665 18 4
F. Bankart and Sons	418	1182 12 0
Copper Miners' Company	168½	906 12 2
Charles Lambert	450	1502 12 0
Sweetland and Co.	379	959 4 0
Total	4404	£23,002 13 0

Copper ores for sale on Thursday next, at Tabb's Hotel, Redruth.—Mines and Parcels.—Clifford Amalgamated 936—West Wheal Seton 613—Tincroft 423—Wheal Basset 334—Wheal Seton 331—Condurrow 327—East Pool 288—South Frances 231—South Tolgus 175—East Basset 140—Camborne Vean 121—Dolcoath 92—Stray Park 69—South Crofty 62—West Tolgus 52—South Wheal Basset 50—Wheal Grenville 37—Carn Camborne 28—East Wheal Grenville 23—Wheal Trefusis 10.—Total, 4342 tons.

Copper ores for sale on Thursday week, at Tabb's Hotel, Redruth.—Mines and parcels.—Great Wheal Alfred 601—West Basset 518—Carn Brea 419—Levant 295—Par Consols 286—Pendeen Consols 212—Great South Tolgus 198—East Alfred Consols 173—Wheal Charlotte 155—Prosper United 106—Copper Hill 96—Botallack 88—Rosewarne United 83—West Fowey Consols 80—Treloweth 72—Wheal Buller 66—Wheal Anna 55—Wheal Unity 24—Rosewarne Consols 24—New Wheal Hender 24—South Dolcoath 16—Great Work 13—Camborne Consols 11—West Tolvadden 9—Trencrom Mine 2.—Total, 3624 tons.

FOURTH SALE IN JANUARY.

Years.	Tons.	Prod.	Amount.	Standard.	Ore copper.	Cake cop.
1852	3197	7	£15,918 8 0	£110 19 0	£71 11 0	£88 10
1853	3192	5¾	21,265 17 0	164 14 0	116 12 0	107 10
1854	2846	6¼	18,868 15 6	148 19 0	105 4 0	126 0
1855	4582	6¼	28,466 1 6	138 17 0	96 5 0	126 0
1856	3117	5½	16,245 6 0	145 7 0	95 3 0	126 0
1857	4233	6¾	31,761 2 0	162 4 0	118 14 0	135 0
1858	3218	6¼	19,805 11 0	141 11 0	97 17 0	117 0
1859	3356	6⅜	20,247 9 6	141 19 0	101 6 0	112 10
1860	3428	6⅝	23,647 18 0	144 17 0	103 8 0	117 0
1861	2327	6½	13,450 8 0	130 6 0	88 5 0	102 10

The copper in the ore expresses the nett price per ton of copper paid to the miner.

Copper Ores for sale at Swansea, Feb. 4.—Cuba 100, 95, 92, 90, 85, 4, 78, 45, 44, 6—Berehaven 115, 89, 114, 84, 80, 68—Knockmahon 93, 66, 64, 70, 31, 85, 55—Oakip 54, 53, 50, 49—Wheal Maria 48, 42—Genoa 109, 19, 13, 11, 2, 1—Glasgow slag 148.—Total, 2253 tons.

THE WARMLEY COLLIERY, AND SPELTER WORKS COMPANY (LIMITED).

This company, advertised in the daily papers during the past week, will CLOSE the LIST of SUBSCRIPTIONS on MONDAY, the 3d February.

In the meantime, full particulars, with prospectuses of the undertaking, may be obtained at the offices of the company, Abchurch Chambers, E.C.; of Messrs. JOSHUA HUTCHINSON and Son, the brokers; Messrs. STUCKEY'S, banking company, Bath and Bristol; THOMAS CRUTTWELL, Esq., solicitor, Bath; Messrs. BAILEYS and Co., bankers, Newport, Monmouthshire; and of Messrs. WHITWORTH, COOKSON, and Co., Carlton-buildings, Manchester.

PREFERENCE SHARES.—The NANTEOS AND PENRHIW UNITED MINING COMPANY (LIMITED) having resolved to DISPOSE OF the FOUR HUNDRED AND SEVENTY-TWO FORFEITED SHARES, the Directors are PREPARED to RECEIVE APPLICATIONS for the same on the following very advantageous terms, viz.:—£3 per share (£3 12s. paid-up), £1 to be paid with application, and the remainder in two monthly instalments of £1 each, but if they are paid at once a discount of 5 per cent. will be allowed. The above price of £3 per share will be returned to the holders out of the first profits, and these shares thereafter rank equally for all purposes with the existing ordinary shares. The company is in 5000 shares of £4 each, £3 12s. paid (of which the above forfeited shares are part), so that there would remain a liability of only 8s. per share to call up.

There are now thirty-four men working in the mines, on tribute, at an average of £5 19s. per ton of ore, including every expense of making it ready for sale, which gives a good profit, while the other operations are likely to lead to further discoveries. The ore ground already laid open has recently been valued by a disinterested practical agent at £7000, and he says "There is an immense quantity of lode standing unexplored in the upper levels, which no doubt will be found equal in quality to that already laid open for working," and that "a small discovery in new ground would enable the proprietary to give dividends." He has "great confidence in good bunches of ore being discovered," and states that there is "an immense quantity of virgin ground to drive into, and the discovery of a good deposit of ore, which is likely to occur in this direction, would enhance the value of the property ninefold." There is an extensive plant of good machinery for all purposes.

In allotting the above shares a preference will be given to the present shareholders, and if no shares are allotted the deposit will be returned in full. Any further information can be obtained on application, either by letter or personally, at the office, No. 117, Bishopsgate-street Within, E.C. J. H. MURCHISON, Managing Director.

January 21, 1862.

THE CARDIGANSHIRE CONSOLIDATED MINING COMPANY (LIMITED).

Increase of nominal capital to £50,000. In 10,000 shares of £5 each.

The shareholders will not be liable beyond the amount of their respective subscriptions.

5s. per share to be paid with application, and 15s. per share on allotment.

DIRECTORS.

CHARLES COPLAND, Esq. (Messrs. Copland and Co.), Bury-street, St. Mary Axe.
JOHN KILNER, Esq., Bury St. Edmunds.
PARKE PITTAR, Esq. (Messrs. P. Pittar and Co.), 26, Gresham-street.
PERCY MARSH SHARP, Esq. (Messrs. Hancock, Sharp, and Hales), 20, Tokenhouse-yard.
(With power to add one more.)

SOLICITORS—Messrs. Hancock, Sharp, and Hales, 20, Tokenhouse-yard.
CONSULTING MINING ENGINEERS—Messrs. Phillips and Darlington, 26, Gresham-street.
BANKERS—London and Westminster Bank, Lothbury.
AUDITOR—Charles Eley, jun., Esq., 27, Great George-street, Westminster.
LONDON MANAGER, AND OFFICES—J. H. Murchison, Esq., No. 117, Bishopsgate-street Within.

BROKERS.

London ..... Messrs. Alexander and Lindow, 21, Tokenhouse-yard.
Manchester.... James Gorton, Esq., Newmarket Chambers.
Aberdeen..... H. C. Oswald, Esq., Marischall-street.
Exeter..... Mr. John Harris.
Dublin..... Messrs. Smyth and Du Bédat, 11, College Green.

ABRIDGED PROSPECTUS.

This company holds the celebrated lead and copper mines known as Esgair-hir and Esgair-fraith, situate in the rich mineral district of Cardiganshire, and which many years ago made enormous returns.

These mines are also on the same lode as the Dyliffe Mine, for which Mr. Bright, M.P., and his friends, gave £24,000, and having laid out £10,000 more in explorations, &c., their returns are now upwards of 200 tons of lead ore per month, which it is believed give a profit of about £1000 per month. The Cardigan Consols Mines are yet only 60 fms. from surface, and the sett extends two miles on the course of the lodes.

Messrs. Phillips and Darlington state that if adequate capital is provided, they "are of opinion that the Cardigan Consols Mines offer more than average security for the money so employed."

The managing agents of the Dyliffe and the Dyfngwm Mines (both making profits), speaking from "experience of 30 and 20 years in a similar stratum," and "now carrying on works of the same magnitude on the very same lode," consider that, if properly worked, Cardigan Consols Mine will become "one of the first in the kingdom."

The Welsh lead mines have been famous for centuries for their immense productiveness and profits. Many of them have been, and are still, carried on as private undertakings; but the following may be given as the results of some of the successful mines that are now at work, where adequate capital has been provided to carry them out; though, with the exception of Minera, Cardigan Consols Mines are likely to greatly exceed the results of those named, and be on a much larger scale:—

No. of shares.	Name of mine.	Amount paid-up per share.	Present price per share.	Dividends paid per share.
867	Cwm Erfin	£ 7 10 0	£ 21 0 0	£ 6 15 0
128	Cwmystwith	60 0 0	200 0 0	227 10 0
300	East Darren	52 0 0	50 0 0	77 10 0
400	Lisburne	18 15 0	110 0 0	377 10 0
1800	Minera	25 0 0	180 0 0	75 0 0

Applications for shares, in the form annexed to the prospectus, accompanied by a deposit of 5s. per share, may be addressed to the directors, or to the brokers. On allotment, 15s. per share additional will have to be paid, but if no shares are allotted the deposit will be returned.

Detailed prospectuses, with the reports, and forms of application for shares, may be obtained at the office, 117, Bishopsgate-street Within, E.C., or from any of the brokers. The prospectus will also be found at length in the *Times*, *Daily News*, *Morning Post*, *Economist*, *Mining Journal*, and *Limited Liability Journal*, of 30th November, 1861.

THE GREAT DAREN SILVER-LEAD MINING COMPANY (LIMITED).

Incorporated by virtue of the 19th and 20th Vic., c. 47, and 20th and 21st Vic., c. 14.

Capital £36,000, in 12,000 shares of £3 each.

£1 to be paid at the time of subscribing, and the balance, if required, by instalments of 5s. each.

DIRECTORS.

CHARLES PRESTON, Esq., Water-lane, Tower-street; and Hull.
JAMES FAIRBAIRN, Esq., Twickenham.
JOSEPH COTTERELL, Esq., Crown-lane, Twickenham.
ALBERT MILSTEAD, Esq, Ship-chambers, Tower-street.
E. C. COCKCRAFT, Esq, Admiralty, Somerset House.
JOSHUA NUNN, Esq., 67, Gracechurch-street.
JOHN HADKINS, Esq., 43, Mark-lane.

BANKERS—Bank of London, Threadneedle-street.
SOLICITORS—Messrs. Preston, Turner, and Garrett, Water-lane, Tower-street.
AUDITOR—John Dunbar, Esq., 63, Moorgate-street.
LOCAL PURSER—C. M. Thomson, Esq., Banker, Aberystwith.
CONSULTING ENGINEER—Capt. M. Francis.
SECRETARY—Mr. Thomas Spargo.

REGISTERED OFFICES,—224 and 225, GRESHAM HOUSE, OLD BROAD STREET, LONDON, E.C.

This company is formed for the purpose of acquiring and developing certain rich mineral properties situate in the county of Cardigan, and known as Daren, Daren East, and Cwm Daren Mines, about six miles from the port of Aberystwith, in the centre of the richest silver mines in that county.

The Old Daren is one of those ancient mines formerly worked by Sir Hugh Myddelton, from which he derived immense profits, with the inefficient and rude machinery then employed to carry on the works. The ore raised from the lode in this sett is extremely rich, producing upwards of 40 ozs. of pure silver to the ton, and about 75 per cent. of lead, thus taking the first place amongst the argentiferous lead ores of Cardiganshire.

Prospectuses and maps, together with forms of application for shares, may be obtained at the offices of the company.

ST. JUST UNITED TIN AND COPPER MINING COMPANY (LIMITED), IN THE PARISH OF ST. JUST, NEAR PENZANCE, IN THE COUNTY OF CORNWALL.

Incorporated under the Joint Stock Companies Acts, 1856 and 1857.

Capital £15,000, in 6000 shares of £2 10s. each. Deposit on application 5s., and 5s. on allotment.

DIRECTORS.

JAMES WRIGHT, Esq., C.E., 42, New Bridge-street, Blackfriars, London.
Col. BUSH, 55, York-terrace, Regent's-park, London.
THOMAS COOPER SMITH, Esq., 5, Warnford-court, Throgmorton-street, London.
} Directors of the Great Wheal Martha Mining Company.
Capt. GOLDICUTT (late 60th Rifles), Barton Villas, Barnsbury, London.
WENTWORTH LASCELLES SCOTT, Esq., M.S.A., Westbourne-park Bayswater, London.
WILLIAM OGILVIE, Esq., Old Broad-street, London.
CHARLES T. HAWKINS, Esq., 9, Broad-street, Oxford.

BANKERS—Roharts, Lubbock, and Co., 11, Mansion House-street, London. Batten, Carne, and Carne, Penzance, Cornwall.
BROKER—Alexander Young, Esq., 3, Bartholomew-lane, or Stock Exchange, City, London.
SOLICITORS—Messrs. Hancock, Sharp, and Hales, 20, Tokenhouse-yard, City, London.
AUDITORS—Messrs. Cooper Brothers and Co., 13, George-street, Mansion House, London.
MANAGING DIRECTOR—Mr. Thomas Cooper Smith.

OFFICES,—5, WARNFORD COURT, THROGMORTON STREET, LONDON.

This company is established for purchasing and working the extensive and valuable tin and copper mines, called the St. Just United, in the parish of St. Just, near Penzance, Cornwall, and situate in a district which is one of the most productive in the county, and has become distinguished by the rich returns and profitable results of mining operations carried on within it.

These mines lie immediately adjacent to the rich Botallack, Levant, and other mines, all making large dividends, and producing tin in the granite inland, and copper ore in the killas under the sea.

The company having been completely registered with Limited Liability, no shareholder can, under any circumstances whatever, be made responsible for a greater amount than the shares to which he subscribes.

A considerable portion of the capital has been already subscribed, and the directors will proceed to allot the shares in a short time.

Prospectuses, plans, forms of application for shares, and any other information, may be obtained of the managing director, at the offices of the company, or from ALEXANDER YOUNG, Esq., Stock Exchange, London.

ST. JUST UNITED TIN AND COPPER MINING COMPANY (LIMITED).—MR. THOS. COOPER SMITH having ACCEPTED the MANAGEMENT of this COMPANY, all future applications must be made to him, at the new offices, 5, Warnford-court, Throgmorton-street, London.

Now ready, price 1s.,

THE PROGRESS OF MINING IN 1861, BEING THE EIGHTEENTH ANNUAL REVIEW.

By J. Y. WATSON, F.G.S., Author of the *Compendium of British Mining* (published in 1843), *Gleanings among Mines and Miners*, &c.

THE SEVENTEENTH ANNUAL REVIEW OF MINING PROGRESS appeared in the MINING JOURNAL of December 29, 1860, and January 5, 1861.

A FEW COPIES of the REVIEW OF 1855, containing Statistics of the Metal Trade the Dividends and Percentage Paid by British and Foreign Mining Companies, and the State and Prospects of upwards of 200 Mines. Also a FEW COPIES of the REVIEW OF 1852, 1853, and 1854, MAY BE HAD on application at Messrs. WATSON and CUELL'S Mining offices, 1, St. Michael's-alley, Cornhill, London.

Also, STATISTICS OF THE MINING INTEREST. By W. H. CUELL.

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published every Thursday morning, price 6d. or £1 1s. per annum, contains Special Reports of Mines, and the Latest Intelligence from the Mining Districts, from an exclusive resident agent; also, Special Recommendations and Advice upon all subjects connected with Mining, and interesting to investors and speculators. A Record of Daily Transactions in the Share Market, Metal Sales, and General Share Lists, &c. Edited by J. Y. WATSON F.G.S., and published by WATSON and CUELL, 1, St. Michael's-alley, Cornhill.

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INVESTMENTS IN BRITISH MINES.—Mr. MURCHISON'S REVIEW OF BRITISH MINING for the QUARTER ENDING 30TH MARCH, 1861, with Particulars of the Principal Dividend and Progressive Mines, Table of the Dividends Paid in the last Five Years, &c., is NOW READY.

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Reliable information and advice will at any time be given on application.

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By WILLIAM RICKARD,

Teacher of Practical Mining in the late Mining School of Cornwall, and Principal of the Engineering Academy, 4, Myrtle-street South, Liverpool.

TRURO: Heard and Son.—LONDON: Longman and Co.; the office of the *Mining Journal*, 26, Fleet-street; of the author, and of all booksellers.

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VENTILATION OF COAL MINES. AN ESSAY ON THE CAUSE OF EXPLOSIONS, AND MEANS OF PREVENTION.

By a COLLIERY MANAGER.

Free and unprejudiced minds will neither antiquate truth for the oldness of the notion nor slight her for looking young, or bearing the face of novelty.—HENRY MORE, F.R.S.

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MINING AND ENGINEERING CONTRACTS EFFECTED.

Notices to Correspondents.

UNDERGROUND SURVEYS.—I find that a complaint is now made that some new sort of instrument, which I suppose will hereafter be found to be the invention of the person recommending it, should be used in preference to the miners' dial, but as for the miners' use the more simple the instrument is the better. I think it would be difficult to find anything better than the common dial.—G. J. F.

PARAFFIN OIL.—Having seen several paragraphs in the Journal, strongly recommending the Asphaltum Company's safety-gauge, as a test for paraffin oils, I tried it with some which I purchased from a retail dealer, who informed me he had purchased it from Messrs. James Parker and Co., and manufactured by Bain, Carlile, and Co., the well-known makers in Glasgow, under Young's patent, but I found it below the specific gravity of ·820, which is pronounced unsafe. Upon communicating with those gentlemen, they state that their oils are perfectly safe at ·800. If this be true, it is obvious that not only is a grave injustice done by the Asphaltum Company to Mr. Young and his licensees, but purchasers of the gauge pay for one which is comparatively worthless.—A SUBSCRIBER.

A FORTUNATE MINE LORD.—We have made enquiries into the statement of "Great Hewas," respecting the Cuddra Mine, in last week's Journal, and find that there is no foundation for his assertions; indeed, our correspondent, not being perfectly informed, has entirely misstated the circumstances, and with which, as we have learned, the shareholders have every reason to be well satisfied.

SILVER VEIN.—"A Shareholder" would like to know if anything is being done at this mine? and if so, what? Also, if we are to hear anything more of Mr. Squire, and his treatment? Other mines of less note report almost every week, through your columns, their progress, but it is now a considerable time since we heard anything of—SILVER VEIN.

HINGSTON DOWN.—As regards this mine, it would be well if those who attend the meetings would take some steps to obtain such information respecting the mine that persons generally do with regard to their own business matters: they would be doing a favour to those who are at a distance, and not able to attend. I have understood there is a good mine, and by this time, with prudence as to expenses and proper management, a dividend ought to have been declared.—Z.

HINGSTON DOWN.—In April, 1859, I bought some shares in Hingston Down, at 7*l.* per share. The mine at that time was working at a loss. Now it is working at a profit, the shares can be obtained at 3*l.* 15s. per share. Can any one inform me why this is?—A SHAREHOLDER.

"O. P." should address the secretary, who, we are sure, will see that every justice is done the party referred to.

NATIONAL ASSOCIATION FOR THE RELIEF OF BRITISH MINERS.—The deputations from this association have been very active in this district during the week, and intend to return to London on Monday, when they will be enabled to give a good account, founded on their first visit to a pit village, which will, no doubt, be an inducement to the good people of Bayswater to subscribe liberally. They gave 50*l.* to the Hartley fund, and must have expended scarcely 50*l.* in expenses, so that a large proportion of the amount which they have collected from the public still remains to be applied in developing the objects of the association.—R: *Newcastle*.

PELYN WOOD MINE.—The plaintiff's name in the lawsuit, mentioned last week, was Crook, not Cooke.

THE MINING JOURNAL
Railway and Commercial Gazette.

LONDON, FEBRUARY 1, 1862.

The occurrence of the fearful calamity—which we feel compelled, though unwillingly, to class amongst those of a preventable character—at the HARTLEY NEW PIT has, as is usual in the case of these too frequently-recurring colliery disasters, inundated us with communications from all quarters, explaining how the accident might have been avoided, and how, in the event of a similar accident hereafter, its terrors might be lessened, and the loss of life reduced to the minimum. A large number of these, however, appear to have been written by those who have probably never seen a mine, and who are totally unacquainted, even theoretically, with the system of working pursued, and the difficulties which are encountered; yet some of the suggestions are worthy of being placed on record, that those concerned may have the opportunity of availing themselves of them, or of adopting such modifications as may meet their particular case. Such propositions as those of gentlemen, one of whom is well known in the commercial world, who recommend that every mine owner should be compelled to keep a supply of provisions, in the shape of ship-biscuits in air-tight cans, and flasks of brandy and water, sufficient to feed the whole of the men in the pit for fifteen days, we pass by, the solemnness of the occasion and the evident philanthropic motives of the writers preventing criticism; but there are others which, although from gentlemen totally unconnected with the working of collieries, are certainly worthy of consideration, and likely to prove practically useful in a large number of cases.

The correspondents advocating compulsory parliamentary enactments which shall ensure the use of two shafts in each colliery becoming general are, of course, numerous; the argument urged in most instances being that there could be no objection to such an enactment, because if greater cost were incurred in getting the coal to surface the colowner could readily reimburse himself for the additional outlay by charging an extra price for the coal—the fact that the selling price is regulated by various local circumstances, and the competition existing at the time, being entirely lost sight of. There are some, however, who look at these facts boldly, and yet suggest a remedy—their line of argument being, as might be supposed, a totally different one. No less than five gentlemen, two of whom are practically connected with collieries, advocate plans which only differ from each other in unimportant details. It is not likely, they say, in a new and undeveloped district that the extent of the royalty would be so limited as to render the sinking of two shafts unjustifiable, and there could, therefore, be no valid objection for a parliamentary enactment making it criminal to work any colliery without two ways of ingress and egress, for if the royalties be very limited in extent, and it be the practice in the district to work with one shaft only, assuming, of course, that the sinking of a second pit would not be justified by the profits accruing, the requirements of the enactment could be complied with by an arrangement being entered into between the proprietors of two adjoining pits, whereby their workings might be put in communication with each other.

Such an arrangement might not be generally acceptable under existing circumstances; but, if such an enactment as that mentioned were made, it would simply remain to the coalowners to decide which course was most to their advantage—to co-operate with their neighbour, or to sink an additional shaft at their own cost. It is contended that there are very many cases in which this system could be adopted, and that in some of them it would be more profitable to abandon the mine altogether than to open an additional means of communication in any other way. So long since as 1835, the necessity for more shafts was pointed out to the Government by GEORGE STEPHENSON, who explained that *no* additional expense would be incurred even in the first instance, as the cost of the bratticing being saved would compensate for the extra outlay of the walling of the second shaft; by Mr. JOHN GARFORTH, a proprietor and director of mines in Lancashire, who spoke from sixty years' experience; and by Mr. J. MATHER, the indefatigable secretary of the South Shields Committee; and the working miners must be gratified to see that our valued correspondent, "A Voice from the Mines," who has strenuously advocated their cause for more than a quarter of a century, still evinces his readiness to use his influence in their behalf. With regard to the working of collieries with single shafts, we may refer to the proceedings at the last meeting of the Manchester Geological Society, which we publish in another column; and as two of the Government Inspectors—Messrs. DICKINSON and WYNNE—as well as several other gentlemen practically connected with collieries, took part in the discussion, importance naturally attaches to it.

In considering the necessity for the compulsory use of two shafts, it should be recollected that the accident at the Hartley New Pit is not the first in which life has been sacrificed from the want of this provision; but as 210 lives have now been sacrificed by a single calamity, we may reasonably hope that it will be the last. That the Government intends to take some steps with a view to remedy the defect is apparent, from the circumstance that already the Secretary of State has required each Inspector to transmit to him a statement of the number of shafts used in every colliery in his district. We subjoin the letter which Mr. DUNN has received:—

"Whitehall, Jan. 24, 1862.

"SIR,—I am directed by the Secretary, Sir GEORGE GREY, to request that you will transmit to him, at your earliest convenience, a return showing the number of single unbricticed shafts in the several collieries in your district, and their depth, diameter, and the mode in which they are subdivided, and also of the number of collieries in your district with more than one separate and distinct shaft, and stating in each case whether ventilating furnaces are used below ground.

"I am further to request that you will state your opinion as to the practicability of requiring that in all large collieries there should be two distinct shafts.—I am, &c.,

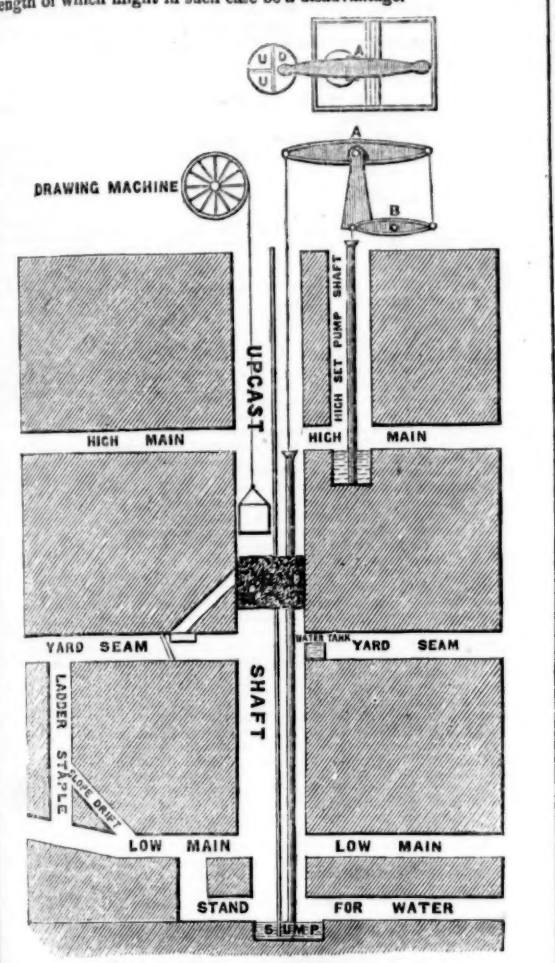
"MATT. DUNN, Esq., Government Inspector of Mines. H. WADDINGTON."

We sincerely hope that the movement thus well commenced will not be suffered to stop until some really preventive measures have been enacted. Hitherto the Coal Mines Inspection Acts have been ineffective, not so much from failure to discover a remedy for the many dangers encountered in the pit, but in consequence of the repeated adjournments of the debates and committees on the matter permitting those adverse to governmental inspection to obtain the introduction of clauses rendering the best endeavours of the Inspectors unavailing, and to secure the expunging of clauses of the greatest value for the protection of the miner. When the bill for the Regulation and Inspection of Mines was before the House of Commons in 1860, it was hoped that the Burradon explosion, which occurred on March 2 of that year, would have resulted in efficient measures, but the adjournments were continued until the 76 deaths at Burradon had been almost forgotten, and the session was so far advanced that no time was left for calm deliberation on the subject; the most strenuous exertions of Sir G. C. LEWIS, Mr. GEORGE CLIVE, Mr. KINNAIRD, Mr. FREELAND, and Mr. ACTON S. AYRTON in the Lower House, and of Lord KINNAIRD in the Upper House, being necessary to prevent the passing a bill which, through the sweeping alterations introduced by Lord RAVENSWORTH, who is deeply interested in coal mines, would have been the merest mockery of a protective measure for the workmen. We trust that now we have to deplore the loss of 665 lives by four colliery accidents within the past six years—112 at Cymmer, in 1856; 192 at Lund Hill, in 1857; 142 at Risca, in 1860; and 219 at Hartley, in 1862—in addition to the many minor casualties, which raise the total to the fearful number of 1000 per annum, we shall not have to complain of so important a subject as that of colliery inspection being passed by as one which can be treated at any time.

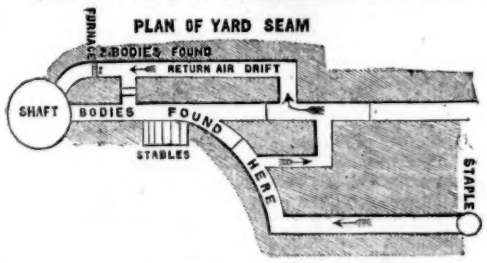
As practical miners, more than any other men, are in a position to judge of the value of the efforts made to prevent accidents in collieries, we willingly refer to the great meeting of working colliers in the Lecture-room, Newcastle, on Jan. 25, their object being to consider the various matters connected with the appalling calamity at the New Hartley Colliery. Perhaps the most important resolution passed was that moved by Mr. JAMES MATHER—"That a petition be sent from this meeting to the two Houses of the Legislature, praying that a special committee be appointed to enquire into the general question of accidents in collieries, with a view to devising some plan by which a repetition of the dreadful calamities that have lately taken place can be obviated; and that, in the opinion of this meeting, no colliery should be worked without two independent pits having been first sunk for the security of the men in the mine." And this resolution, he remarked, would have the support of three of the best Inspectors of mines. One of the Inspectors, he continued, gave evidence before the House of Commons that 70 per cent. of all the men destroyed in mines were destroyed by the after-damp, but these men took some time before they perished, and at this unfortunate colliery the 215 men and boys might have been in the bosoms of their families, within two hours after the occurrence, had there been a second shaft. He believed he might say Her MAJESTY'S Government was alive to the subject, and if Parliament moved in the matter they would see that additional shafts were made for safety. They were not to be made for the purpose of money—they were to be made for the purposes of life and ventilation below. He should be very much disappointed if the miners did not take this matter up, and he thought they would have forsaken themselves if they did not do so. It was their business, and the business of their wives and families, and let them turn their attention to it. Another important feature in this meeting was the discussion between a working miner present and Mr. DUNN, the Government Inspector for the district, which it is feared is likely to result in the superannuation of the Inspector. His great experience is acknowledged by all, but it is contended, and not altogether without reason, that his age prevents him from effectually watching over nearly two hundred collieries. It is admitted that as the law at present stood neither the Inspectors nor the Government had power to order a second shaft to be sunk, but it was urged that where a single shaft is in use (and the argument applies with equal force to every case in which a dangerous system of working is pursued), it is the duty of the Inspector to point it out to the Secretary of State in some more direct manner than by a general annual report. Mr. DUNN had recommended the working miners to communicate in case of defective working arrangements with the Government Inspector; but, as the Chairman of the meeting (himself a working collier) explained, this was to the miners a very dangerous course, as they had only their labour to depend on, and if they complained they were deprived of work. Nothing but a more complete system of governmental inspection, and the investing of the Government and Inspectors with full power to compel all things necessary for ensuring safety to the workmen to be carried out, and to order the immediate closing of the mine in the event of the requirements of the case not being complied with, will prove a remedy, and it is confidently hoped that this there will be no longer any difficulty in obtaining.

With respect to the probable cause of the accident at Hartley, Mr. T. Y. HALL, of Newcastle, to whom we are also indebted for the subjoined sketches showing the nature of the workings, furnishes us with the following statement:—The beam was well proportioned. The metal seems to be of the best quality, and of a strength far exceeding the ordinary requirements of such a beam. It was equal to a strain of 450 tons, and not more than 45 tons had ever been applied to it. No reflection, therefore, can be made upon the engineer, Mr. HORNSBY, nor upon the founders, LOSH, WILSON, and BELL. The cause of breakage must, therefore, be sought for in the failure of a nut in the lower part of the cylinder, or the breaking of the dry spears for the lower set of pumps. Mr. HALL has twice had a coal-drawing engine beam broken in the centre. On one occasion the accident happened in consequence of a small nut that was screwed

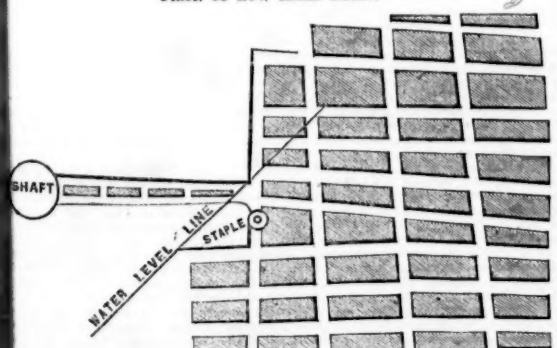
to a bolt on the under side of the piston having come off. The nut when screwed upon the bolt left sufficient room for the action of the piston, but when it came off it turned edge up, and in consequence of the piston not being allowed its free stroke at the bottom it was forced upwards, and so caused the accident. The like effect may, in this case, have been produced either from the above cause, or from an accident to the spears, the very strength of which might in such case be a disadvantage.



PLAN OF YARD SEAM



PLAN OF LOW MAIN SEAM.



We believe the above diagrams will give all the information generally quired, and will render any particulars which may hereafter appear thoughly intelligible. The large beam broke at the point A, 16 ft. 6 in. from e spears. The lower beam, B, worked the high set of pumps, drawing m 7 fms. below the High Main seam; the total length of the top set of mps being 45 fathoms. The main shaft is 12 ft. in diameter, and the al depth from surface to the bottom of the sump, where the lower set of mps rest is 105 fms. The depth from surface to the High Main seam 38 fms., and from the High Main to the Yard coal rather over 30 fms., hich would leave some 30 fms. as the depth from the Yard coal to the w Main. The Low Main is where the principal workings were in proess, and neither the High Main nor the Yard coal were being worked. e opening between the shaft and the Yard seam was simply a hole only t. wide. The confused mass shown in the shaft is that which caused all e delay and difficulty; the side of the shaft was here a soft clay. The ter-tank shown in the Yard coal is that which prevented the sinkers tting into the Yard coal without dropping over it—the cistern over which MERSON first reached the seam; this cistern received the water from lower set of pumps to be supplied to the middle set. In the plan of Yard seam, in order to prevent confusion in the minds of non-prac- al readers, those levels only have been shown through which the venti- ion of the mine was conducted; it must be understood, however, that the llars and stalls were as numerous as in the Low Main—for example, there re three pillars between the top of the staple and the extremity of the gle air-way which runs direct to the place where the bodies were found, also pillars between this place and the entrance to the return air-drift. between all the pillars not shown there were brick stoppings, so that mmunication with the shaft, except by the roads shown, was entirely off. As to the bodies of the unfortunate miners it appears that two, posed to be those who lost their lives whilst "jowling," were found r the furnace as shown, 77 between the stables and the shaft, about 80 he stables, and about 40 between the stables and the single air-way ding from the staple. The bodies of Amor, the overman, and his son e found nearer this single air-way than any of the others, as though y had been the last to desert the post of danger. The men having their working places preparatory to being drawn to surface, were mostly he Low Main seam, between the workings and the shaft; upon the oc- rence of the accident they went up the slope drift 10 fms., and thence nded the staple by the wire-rope ladder some 30 fms. to the Yard coal—top and bottom respectively of the staple are shown in the plans. In small plan above the section the manner in which the shaft was divided hown, D being the downcast portion of the shaft, in which the spears working the low set and middle set of pumps were placed, and U U upcast portion, in which the cages worked for drawing the coal and ng and lowering the men. The bodies were all found in the Yard coal, een the shaft and the single air-way leading from the top of the staple. lines across the air-ways indicate doors by which the current of air is in the required direction; double lines indicate double doors. The ws indicate the course the air for ventilation pursued from the staple to the furnace. The workings in the Low Main seam rise rapidly from what is called the water level line.

The inquest will commence on Monday, and Mr. DUNN has received an intimation from the Home Office that the Government will send down a special commissioner to attend it; the circulation of this fact has given much satisfaction in the district, the feeling that colliery accidents are too frequently carelessly investigated by coroner's juries being very general amongst the mining community. The difficulty of procuring unbiassed evidence relating to deaths in collieries is so great in every case that it is scarcely ever possible for a jury, however independent it may be, to find any other verdict than that of "Accidental Death," and this difficulty is much increased when the workmen are so well treated by their employers that they are unwilling to say a word against them. We have frequently heard colliers say that "if Mr. So-and-So were not so kind to his men this accident would go badly for him, but none of us would injure him, you know." The collier feels, again, that if he says anything likely to implicate the owners or officers of the mine he will have increased difficulty in obtaining employment, and it is, consequently, only in the course of severe cross-examination that he will accidentally let the fact leak out that the arrangements in the pit were not of the best possible character. His disinclination to state the facts, and explain the defects which probably caused the accident is, moreover, too often increased by the presence in the inquest-room of the officers of the mine, and even of the owners themselves; the presence, in fact, of the very men to offend whom would be to deprive himself of bread. Both in our own articles, and in our correspondence columns, the necessity has been frequently pointed out for preventing the appointment of men to situations of trust until they have proved themselves competent for the duties of the office; to ensure this the system has been proposed of granting Government certificates to such as shall have passed a satisfactory examination before a committee of practical men, and of permitting the appointment of no man who does not possess a certificate of the class fixed for the particular office he is about to undertake. This it is thought would be the best preventive of accidents, as the withdrawal of a certificate for misconduct would be as much a disgrace, and would be as much guarded against, as the loss of his certificate by the master of a vessel. There is, of course, little similarity between a colliery and a ship beyond that which arises from the fact that in both cases the safety of those in it depends in a great measure upon the ability and judgment of the officers; but this, we think, should be sufficient to induce a trial of the system to be made. A law of this nature would, doubtless, be at variance with most of the enactments which have been passed in connection with our industrial population, but when it is considered that the accidents in coal mines have been so numerous that the contribution by the charitable of *a quarter of a million* annually would be far insufficient to compensate those deprived of their means of support through colliery accidents, its necessity can, we think, scarcely be doubted.

That it is more, and more stringent, governmental inspection that is required does not seem to be doubted by any, unless it be perhaps by a few of the most illiberal and obstinate of the coalmasters: the sole question appears to be as to the form in which the official protection should be given. It is well known, to the Inspectors especially, that there are some coalowners who from their obstinacy and the false notion that "every man may do as he likes with his own" regardless of the consequences, will take no notice of suggestions and recommendations be they ever so good, and it is to meet these cases that the Inspectors should be invested with additional powers. In the MINING JOURNAL of 1859, when the last Act was on the point of expiring, a correspondent of long practical mining experience pointed out the benefit which would result from the appointment of a Minister for Mines in the measure then about to be re-enacted: the advantage of such a step has never been questioned by disinterested parties, and many, even coalowners, who are thoroughly opposed to the introduction of anything like the continental system, entertain the idea that a Board of Mines would be productive of the greatest good. It should be recollected that the value of our mineral productions now reach nearly *thirty millions* per annum, and that when manufactured even this large amount is considerably increased; but, in addition to this, we should also recollect that in the appointment of a Board of Mines we should only be following the example of one of our Australian colonies, in which the mineral resources are not developed to one-tenth the extent that they are in the mother country. From the want of some such governing power the number of lives sacrificed in our coal mines alone is, as we have already stated, raised to 1000 per annum; and with respect to metallic mines, so eminent an authority as Mr. ROBERT HUNT, F.R.S., the Keeper of Mining Records at the Government School of Mines, asserts that in metalliferous mines the deaths amongst the miners are twice as numerous as in the collieries, but as they are never in vast numbers they are passed by unheeded, and the fact that the average duration of the metalliferous miner's life is reduced to 30 years through the unhealthiness of his avocation is forgotten.

With respect to the beam itself, we shall refer to the remarks of one only of our correspondents—Mr. N. ENNOR—who states that it is the invariable practice in Cornwall to provide beneath the ends of all pumping beams a strong timber balk, well braced in its position, within 1 inch of which the pumping beam falls at every stroke. Mr. ENNOR contends that had this balk been in use at New Hartley it would have been impossible for the broken beam to have done much damage; be this as it may, the fact that such a safety contrivance is in use at some mines certainly deserves the utmost publicity. We are enabled, in another column, to lay before our readers Mr. GOODWIN'S estimates of the cost of sinking shafts under various circumstances, and may take the opportunity of reminding our practical correspondents that we shall willingly give them space for their suggestions for the prevention of these dreadful calamities in our collieries.

MR. M. DUNN, THE GOVERNMENT MINE INSPECTOR, AND THE NEW HARTLEY COLLIERY.

We have authentic documents in our possession to show that Mr. Dunn, one of the most experienced Inspectors of Mines, if not the most experienced, bestowed a great amount of attention upon this disastrous mine of Hartley, having visited it since the commencement of his Inspectorship some 15 to 16 times, up to July last. In that month he received the following statement from the poor miners who have been so miserably destroyed:—

"THE GRIEVANCES OF NEW HARTLEY COLLIERY.—1. We, the miners of Hartley Colliery, have cause of complaint against the officials employed under Mr. Charles Carr, the owner of Hartley, for the bad ventilation of the pit, for we consider that the air is not properly conducted into the face of the workings; and, even if it were properly conducted to the bord ends, we think it impossible for a sufficient quantity of air to travel to the face of the bords without brattice, for some of our pillars are driven from 35 to 40, and upwards of 50 yards, without one holeing."

Although this document was not signed* by the men, Mr. Dunn gave it his immediate attention, knowing their apprehension lest any complaint with their names attached should reach the owners, which might be followed by their discharge, and a general displeasure from the whole northern coal viewers. Upon July 22, accompanied by the officers of the mine and a deputation of the workmen, the Inspector examined it, and heard the statements of both parties. The following *minute*, a copy to each, both men and masters, was sent upon the 23d of that month:—

Hartley Colliery, Newcastle-on-Tyne, July 23, 1861.—1. Having been requested by the workmen of this colliery to visit it and to examine into certain alleged grievances, I yesterday went through the most material parts of the pit, touching the state of the ventilation and course of boring against the Old Hartley waste, and I feel satisfied that the principle adopted of carrying on two flank and one front hole in each leading place is a safe and satisfactory course of proceeding.—2. With respect to the general ventilation, considerable drawback is experienced in the shaft depending upon bratticed air, and also being a pumping shaft, to counteract which it is is desirable that the furnace should be strictly attended to day and night, and the main outlet towards the Yard coal staple should be partially enlarged at the archway.—3. The main air is subdivided into three columns, and as the pillars are of a considerable length, I think it is quite requisite that a few lengths of brattice should be pointed for the bord end to remove the latent powder smoke; also that the main stoppings should be carefully built and overhauled, as the air courses are lengthy and difficult to keep.—4. *As a safeguard against the danger of a heavy discharge of water, I think it imperative that an efficient and convenient ladder (long since arranged for) should be completed without delay at the Yard coal staple, as a means of escape for the people.*—5. I suggest that the sides of the cages be lined with sheet-iron, in order to guard against damage to the arms and legs of persons riding. The most of these subjects were freely discussed whilst Mr. Carr and Mr. Humble were present, and who professed to be willing to comply with all reasonable suggestions.

By clause 4 it is very clear that the miners were secured an outlet to the shaft 65 fms. from the surface (though the pit was 95 fms. deep), provided the recommendation, for the Inspector could not order it, was carried out. This was done, and had the debris and broken timber but fallen 20 feet further down the shaft the men who had flown to the Yard seam would have all escaped the same day. There was a staple down to the High Main from the surface, and another to the Low Main from the Yard seam, leaving only 27 fms. out of the 95 unpenetrated by a continuous staple or small second shaft. It need not be repeated to the readers of the *Mining Journal* that the Inspector has no power to enforce his practical views; and that even suggestions of no great cost for the more safe and better working of particular mines have been more than once resisted. We may instance that of Jarrow Colliery, before it was inundated, when upon the complaint of its miners the Inspector urgently recommended some important ventilation changes. The managers of that mine called in three other influential viewers, and they sanctioned a resistance to the Inspector's views, which resistance was accordingly maintained—the men then struck work. It is, then, a want of knowledge of the real power of the Inspector that has caused somewhat of discontent that he has not done what he could not do. Even his recommendation of another shaft would have been followed by a general resistance of the trade, and it would have been said that an undue and ruinous expense, as it would have been called, was attempted to be saddled upon coalowners against the rights of private property. First give the Inspector the power by some process, *not that of his own arbitrary will*, to influence the sinking of another shaft when required, and then complain—nay, more, impeach and proceed against him criminally—should he neglect such an all-important duty. The Legislature must, it is evident, from the necessities of the case, and the universal public sentiment, pass *an early Act to compel, under heavy penalties, the sinking of two shafts into every mine previous to the commencement of the workings.*

This has long been advocated by many great authorities on mining matters, and last week a letter of great power, as "A Voice from the Mines," which we published, gave an increased development of the subject. We can only say further, in explanation of Mr. Dunn's official conduct, and to his honour, that in one year he visited about 200 pits, some of them more than once. In addition, we cannot omit here stating the efforts frequently made by him to obtain more certain and continued information from every mine, as the paper to the Home Secretary, which we now publish from his report of 1858, proves.

Mr. Dunn reports that first having obtained the sanction of the Secretary of State, he brought forward, for the approval of the Inspectors, at a general meeting of that important body, the following suggestions, founded upon the published evidence after explosions in Yorkshire, Lancashire, and South Wales, where it was shown that for many months previous to the catastrophes, the mines had been working under the most dangerous state of mismanagement, the particulars of which were unknown to the Inspectors until the sittings of the inquests.

This series of queries was to be answered by the viewer, manager, owner, or other chief officer of each mine, upon the demand of the Inspector of the district, who was to supply each mine in his district with a copy. It is unnecessary to detail the advantages that would have occurred from the adoption of this experienced northern Inspector's views, both for the security of mining property and the safety of the miners:—

QUERIES.—UNDERGROUND:—1. Principles of ventilation, natural or artificial.—2. If by lamp or furnace, the dimensions.—3. Hours per day kept at work.—4. If by other means, state particulars.—5. Area of downcast shaft.—6. Ditto upcast shaft.—7. Depth to each working seam.—8. Total quantity of air per minute.—9. How many times split.—10. How many doors in the pit.—11. Naked light or safety-lamps.—12. Who finds the oil and safety-lamps.—13. Are lamps daily inspected.—14. Are they furnished with locks.—15. Furthest extent of workings.—16. Principle of working.—17. Drawing-shafts, how fitted up.—18. Ropes or chains.—19. What sort of brattice.—20. Ditto ditto stoppings.—21. Are plans kept of the workings.—22. Are contractors employed, and in what way.—23. Do the colliers set their own timber.—24. The name of the responsible viewer, if any.—25. Ditto ditto resident.—26. Rules, are they printed and distributed.

ABOVEGROUND: 1. Engines; are they first or second motion.—2. Has each engineman a fireman.—3. Is the shaft fitted up with guides, and what sort.—4. Tubs or Skips.—5. Weight drawn at a pull.—6. Boilers; what safeguard as to steam-pressure.—7. Ditto; ditto water-supply.—8. Are resting-catches employed.—9. Are signals employed between top and bottom.—10. Who takes charge of machinery.

A good deal of discussion took place upon these suggestions, but no specific resolution was come to. Impressed, however, with the advantage that would attend such an adoption, I feel it my duty to introduce it to the notice of Government.—MATTHIAS DUNN, Government Mine Inspector.

We think, detailed and comprehensive too as are Mr. Dunn's queries in developing at a glance the condition of every mine, they would have been more complete with the following most important ones:—

27. WHAT ARE THE NUMBERS OF ACRES IN YOUR WORKINGS?

28. HOW MANY DISTINCT SHAFTS FOR WORKING AND VENTILATING THE SAME.

From what has been now stated, we cannot but feel assured that the conviction will be general, that the Northern Mine Inspector has to the utmost of his power and the limited means allowed him by law, counselled and done what an honest, faithful, and humane public servant ought to have done.

* The men of this colliery, like many others, did not give any names, being afraid that their names might reach the owners, who would not only, they think, discharge them, but the whole coal trade refuse them employment; though it is the invariable practice of the Inspector to refuse their names if asked for; and when the Home Secretary was applied to for that purpose, as in the case of Jarrow, he sustained Mr. Dunn, and also refused to give the names.

PARAFFINE, OR COAL OILS.

Paraffine, or, as this fluid is frequently termed, coal oil, has been for some years past largely used as an illuminating agent. The cleanliness and the economy of the paraffine lamps, with the brilliancy of the light produced, have led to their very general adoption, especially in those places where the conveniences of gas have not as yet been made available.

Paraffine, and indeed all the varieties of the oils which are sold under this name, are, like it, compounds of carbon and hydrogen. They are produced by the distillation, at carefully-regulated temperatures, of coal, of certain carbonacious shales, and the different varieties of petroleum, which are now so largely obtained in America and in Asia. As we have said, from whatever source derived, these oils are hydrocarbons, and, according to the temperature at which the distillation is effected, there result *heavy* or *light* oils, as they are termed by the manufacturers. These oils are of variable specific gravities, and their boiling points range all the way from 46° to 600° Fahr. Hence it is that explosions have arisen from the improper admixture of the lighter oils with the heavier ones. In some cases this has arisen from insufficient purification of the oil for burning, and in others (which include by far the larger number of cases) by the mixture of volatile oils obtained from other sources, with the less inflammable oils distilled from coal.

In the early stages of this manufacture Cannel coal was almost exclusively used as the oil-yielding material, but since the discovery of the oil wells of Pennsylvania and other places, petroleum has in a great measure supplanted the use of coal, some establishments using the natural oil alone. The object of this is readily appreciated.

The petroleum being naturally in a liquid state, there is no necessity for a preliminary distillation, as in the case when coal is used, in which event the crude oil must be first produced by exposing the coal to distillation at a low heat, and the resulting product be treated in the same manner as the oil already formed in the wells. By the use of petroleum the retorts for the first distillation are dispensed with, and thus a saving is effected in apparatus as well as in time and labour. When petroleum alone is used in the manufacture of kerosene oil the product contains a much larger proportion of volatile hydrocarbons than when coal is wholly or partially employed, and, therefore, more precautions are necessary and greater labour is requisite to effectually get rid of these dangerous substances. Some manufacturers not only neglect to remove the volatile compounds from the oils, but actually purchase the light oils from more conscientious refiners, in order to mix them with heavy oils to make them burn. This is an exceedingly reprehensible practice, and deserving severe punishment, for the heat generated by the heavy oils in burning vaporises the volatile portion, and renders it liable at any time to explode. The oils distilled wholly from coal, or those with which but a small proportion of petroleum has been mingled, are much more easily freed from dangerous portions. By a careful refining, and after distillation, steaming, and a large surface of atmospheric exposure, every dangerous compound can be removed, and no fear need be apprehended from oils which are known to be subjected to a rigid and conscientious refining. In purchasing oils, however, nothing should be taken for granted. They should be carefully tested, and their liability to explode fully investigated. The simplest and most satisfactory test of safety is to place the oil in an open dish in a water bath, and heat it up to 130° to 140° Fahr. If when elevated to this temperature, on applying a match it does not ignite, it may be pronounced very safe. If it ignites but slowly or sluggishly it is safe. But any oil that lights quickly in an open dish, at temperatures below 130° Fahr., may be considered as dangerous. We have seen oil the vapour of which ignited with a smart puff or explosion at 60° Fahr., on holding a lighted match more than 1 in. above its surface. This was dangerous in the highest degree, and the vendor of such a compound should be held to strict accountability for any accident occurring from its being burned in lamps.

The extensive use of these oil-lamps amongst the working classes induces us to call especial attention to this very simple test. To those who may not be provided with a thermometer to measure the temperature the following simple rule may be adopted:—Pour into a basin a pint of

boiling water, and allow it to stand to cool for five minutes; then pour some of the paraffine oil into a teaspoon, and having floated the bulb of the spoon on the hot water, leave it at rest for a few minutes; then hold a lighted match a little above the spirit: if it ignites quickly it is dangerous, if not at all, or very slowly, the paraffine may be used without fear of accident. A *metallic* fountain or reservoir should always be avoided in using any of these hydrocarbon oils.

To show the vast difference of the oils now on sale as paraffine oils in this country, Dr. R. Angus Smith, F.R.S., of Manchester, an eminent chemist, has lately found that oil made by Mr. Young, the inventor, and his partners, from coal, and who have really the only right to call their oil paraffine, will not ignite in an open vessel at 154° Fah.; whilst a sample of American rock oil, sold as paraffine, exploded at a temperature of 46° Fah.

REPORT FROM NORTHUMBERLAND AND DURHAM.

JAN. 30.—The position of the Coal Trade has improved a little in this district. There has been an increase in the shipment of coals from the Tyne of 345 chaldrons, and a decrease in the shipment of coke of 302 tons, and of iron 5345 tons.

The last act of the dreadful drama at Hartley has now been finished—the bodies having all been got out, and also interred. The scene beggars all description. The occurrence has caused great excitement; it has, indeed, convulsed the mining population of the North—never before did any mining calamity produce such an effect. It is remarkable that the imprisoned miners have left no account of their proceedings during the time they survived. The only information on this head appears to be that afforded by a memorandum found in the note-book of Mr. Amour, the back overman. The words were:—"Friday afternoon at half-past one, Edward Armstrong, Thomas Gladstone, John Hardy, Thomas Bell, and others, took extremely ill; we also had a prayer-meeting at a quarter to two, when Tibbs, Henry Sharp, J. Campbell, H. Gibson, and W. Palmer—(this sentence is incomplete)—Tibbs exhorted to us again, and Sharp also." This is all the information recorded. The watch had stopped at ten o'clock; and it is inferred from this circumstance that Amour had never wound up the watch after making the above entry, and that it stopped the same night. Many heart-rending scenes occurred in the various rows around the colliery. Nothing was to be heard, both in the houses and in the roads without, but crying and agonising sobs. As soon as it became generally known that the bodies of the unfortunate men were in course of being brought to bank the doors of every house in the rows were crowded with widows, fatherless children, and friends, their faces anxiously and tearfully turned towards the approaches from the pit. The cart containing the first body (that of John Gallagher) was eagerly watched, each poor woman expecting that it might be that of her companion of so many happy hours, and the object of so many endearing ties. When it reached its destination, the outbursts of grief which during the past few days had much moderated in their violence, from Nature having been quite exhausted and worn out by such an overwhelming trouble, broke out afresh. The sight of the poor widow's grief was sufficient to melt the most indifferent. Her little family clung round her, adding their sobs to their mother's hysterical grief. The neighbours crowded round, and while their tears proved their sympathy with the poor widow, vainly endeavoured to comfort her whose case was only an example of their own. There was not a dry eye in the room: and from every house the sounds of bitter grief reached the ear of the passer-by through the open doors. Widows were calling fondly upon the names of their "canny men;" children were repeating, in choking accents, while their cheeks were swollen and their eyes red, the name of "My canny father! Oh, dear; I'll never see him again." One little girl, with an infant in her arms, was standing at an open door, sobbing like to break her little heart, and now and again calling upon "My canny uncle! my canny uncle!" Each were bewailing their several losses, and all in accents of the bitterest grief. Little children were running about amongst the crowd with the tears coursing down their faces; some calling upon the names of affectionate fathers whose knee they will never again sit upon, whose smile will never again beam upon them as they met him upon his return from his daily toil, and whose affectionate caress will be received no more; others asking for their brothers, who had been the support of the family, but whom God in His mysterious providence had seen fit to remove. In the house of Mrs. Liddle there were seven corpses; in the Oliver's there were five; and in many houses there were from three to four bodies. The friends and relatives of the several families will each be laid together in one grave, in Earsdon Churchyard. Many of the graves will contain from two to three corpses, while in others six or seven bodies will repose; and in one immense trench there will be no fewer than about thirty bodies deposited.

An important meeting was held in the Lecture-room, Newcastle, on Saturday. The meeting was addressed by several coal miners, and also by Mr. Cowen, Mr. Mather, and others. Mr. Mather moved—"That a petition be sent from this meeting to the two Houses of Legislature, praying that a special parliamentary committee be appointed to enquire into the general question of accidents in collieries, with the view of devising some plan by which a repetition of the frightful calamities that have lately taken place can be avoided, and that in the opinion of this meeting no colliery should be worked without two shafts having been first sunk for the security of the men and the mine, which should be secured by law."—Mr. Jos. Cowen, jun., seconded the resolution. He said the whole question of accidents in coal mines would have to be enquired into thoroughly, and at once. But while he said this, he did not mean to cast any reflections on the owners of the particular mine which had been the scene of the late horrible catastrophe. The only feeling that existed in the district amongst all classes towards the very unfortunate owners of Hartley Colliery was one of sympathy and commisseration. They had simply acted in accordance with a very general custom in working their mines, and in asking for a searching investigation into the entire subject it was not individuals, but it was the entire system they condemned. They must insist upon all collieries in future having two shafts, or two good modes of entrance and exit of some kind, and he believed that the general adoption of such a system would conduce as much to the pecuniary advantage of the colliery owners as it would certainly do to the safety and comfort of the working pitman.

A Miner did not think there was any use in the Government Inspector ordering two shafts to be sunk if there were no means used to carry out that order. If Mr. Dunn knew this was not a good shaft, and if he was not endowed with the power to alter the system, he ought to have laid it before the public. Then the public would have seen that he was upon their side, and not upon the other. He would like Mr. Dunn to state how far he was prepared to do these things.

Mr. Dunn said, in the first place, he had a circular from Sir George Grey, showing that up to this time Government had not the power themselves of ordering a double shaft, and every Inspector was called on to give him information as to what shafts were single and what were double. Many people did not understand the object of this Government inspection. The Inspectors could only deal with general principles. An Inspector could not go into this, that, and the other mode of working the pit, and it was the fault of the men themselves if they did not call the Inspectors more frequently.

Mr. Towers stated that he had come there at the instance of Sir Fitzroy Kelly, and other gentlemen who had taken a deep interest in the welfare of the British miners. He urged the necessity of permanent provision being made for the support of the miners.

The petition, moved by Mr. Mather, was then unanimously adopted.

An intimation has been received to the effect that the Government will send down an official to attend the inquest, which will be opened on Monday.

A movement has been started to present Mr. Coulson and his band of workmen with a suitable testimonial on account of their great exertions during the perilous operations necessary in opening the Hartley shaft.

Mr. Dunn, Government Inspector, deserves great credit for getting the drift and staple completed, by which the men reached the yard seam, as otherwise they would all have been drowned in 6 or 8 hours, whereas they were all quite safe had the extraordinary and unprecedented obstruction in the shaft not taken place.

An old project, which has never received the support it deserved, has again been revived on this occasion. We allude to the scheme for the formation of a general fund for the relief of the relatives of all miners killed or maimed by accidents. It is well known that numerous accidents occur, where small numbers are maimed or killed, and no public sympathy is enlisted on their behalf, so that they are left entirely to their own resources. The present seems to be a favourable opportunity to get this scheme into operation, and we hope it will do so without delay. All operations are for the present suspended at Hartley. A bust of the late Mr. T. J. Taylor is now exhibiting in the Central Exchange News-room; it is of white marble, and is very highly spoken of.

REPORT FROM NORTH AND SOUTH STAFFORDSHIRE.

JAN. 30.—Neither the Iron Trade of South or of North Staffordshire presents any occasion for remark. Both continue very flat, and even in the works at Wednesbury, which are chiefly engaged in making railway wheels and axles, iron trucks, rails, and other articles connected with railways, which have been active whilst other branches have been depressed, slackness is now experienced. In one or two departments of the Hardware Manufactures there are rather more orders, but the makers generally find a difficulty in keeping their men from the necessity of seeking relief. Owners of houses inhabited by the working-classes are in many cases receiving scarcely a farthing of rent and the tradespeople find a very great falling off in their sales.

The state of pauperism in the manufacturing districts of the county testifies in a forcible manner to the extent of the continued depression of trade. In the two Unions of Wolstanton and Burslem, and of Stoke-upon-Trent, the paupers in receipt of relief in the first week of January were 5428, an increase of 1373 as compared with last year. In the four Unions which are comprised in the South Staffordshire district—Wolverhampton, Walsall, West Bromwich, and Dudley—the paupers in receipt of relief in the first week of this year were 13,622, an increase of 1751, as compared with Jan., 1861. The greater proportionate increase in North Staffordshire is owing to the extreme depression of the Earthenware Trade.

The *Birmingham Journal*, in commenting on the colliery accident at Mr. Dawes' pit, at Blackheath, near Dudley, referred to in this letter last week, very properly urges the desirability of only entrusting the charge of steam-engines to men of experience, the person in charge of the underground engine at this colliery having been only twenty-years of age. In point of fact, a very considerable number of those in charge of steam-engines in South Staffordshire are younger than this, and probably the majority are unable to write, and many cannot read. It is most desirable that the charge of steam-engines should be entrusted to a superior class of men, who must, of course, be better paid than these men generally are. The writer referred to says, "Had this pit been in full week, 70 men or 80 men might have fallen victims to the ignorance or carelessness to which is attributable the loss of three lives and the sacrifice of much valuable property." It is, however, satisfactory to know that there was a second shaft at this colliery, and that in all probability of any men had been at work in the other seams they would have reached this separate downcast shaft, and have been able to escape by means of it. Whatever defects South Staffordshire mining may present, it has the great advantage of possessing a great abundance of shafts to its collieries.

The Hartley Colliery accident has excited great sympathy here, as well as elsewhere, and active efforts are being made in Birmingham, Walsall, Wolverhampton, &c., to contribute to the relief of the bereaved. As compared with the hundreds of fatal colliery accidents which happen yearly, and excite little attention, the surviving friends of the poor fellows who perished at Hartley will be fortunate in having provision made for them.

The half-yearly meeting of the Railway Stock Company was held at Wolverhampton, on Tuesday, Mr. J. Perks (the Chairman) presiding. The company continues to present the same prosperous features which have hitherto marked it. The profits for the half-year amount to 5000*l.*, and the directors were able to recommend a dividend at the rate of 9 per cent., that having been the rate to which the last half-yearly dividend was advanced. Such a result, in a time of commercial depression, is most satisfactory, especially when it is considered that, in addition to the payment of dividends, 773*l.* 14s. 6d. was added to the depreciation fund, and 345*l.* 1s. 5d. remained as an addition to the reserve fund, which is now 3700*l.*

The annual meeting of the Wolverhampton Water Works Company was held on the following day. The report stated the income for the year at 10,082*l.*, and the expenditure, including the dividends due to the shareholders of the old company, and interest at bank, at 8883*l.*, leaving a balance of 1199*l.* available for dividend. After paying the dividend due on the preference shares, the directors were only able to declare a dividend of 8 per cent. per annum, less income tax.

The Severn Valley Railway is to be opened on Saturday for traffic. It will be a great convenience to the district it traverses. Its opening will be celebrated by festivities at Bridgnorth.

REPORT FROM YORKSHIRE, DERBYSHIRE, AND LANCASHIRE.

JAN. 30.—The critical position of affairs in America continues to produce a prejudicial effect upon the commerce of the country in general, and upon the Iron Trade in particular. There are a few good orders in the market for the better kinds of iron, but makers of secondary qualities find a difficulty in keeping their works on full time. The demand for railway iron is the most active, and next to this there is a good business doing in plates for shipbuilding. Messrs. Brown and Co., of the Atlas Works, Sheffield, appear to have an unlimited demand upon their resources, consequent upon the success of the recent trials of their iron. The Steel Trade is very depressed, and many works are making short time, whilst some are stopped altogether. The failure of Messrs. Calvert and Co., of York, with liabilities amounting to about 130,000*l.*, will affect several firms in Yorkshire, but not to any very great extent. A stormy meeting of the creditors was held on Tuesday, when an assignment was agreed upon, and it was hinted that one or two transactions of the firm would come under the head of imprudent trading. The Coal Trade is somewhat improved, but is far from approaching a state of activity. A meeting of the Yorkshire coalowners has been held this week, when great complaints were made as to the rates charged for coal by the different railway companies, and it was thought advisable to make a representation to the different boards of directors, with a view of getting a reduction.

A circular letter has been received by the Government Inspectors from the Home Office, enquiring the number of collieries worked with one, and those worked with two shafts. We apprehend this enquiry has been directed by the Government in consequence of the dreadful slaughter at the Hartley New Pit, and with a view of preparing some legislative enactment thereupon in reference to the working of collieries in which there is only one means of exit. The subject itself is one of such vital importance that nothing hasty should be done, but everything pertaining to the question should be discussed with mature consideration, inasmuch as a false step might involve the sacrifice of many thousands of pounds in the working of collieries. We learn that it is intended to call the coalmasters of Derbyshire together to discuss this important subject, and to take measures for their mutual protection.

Mr. Wynne, the Government Inspector for the North Staffordshire and Cheshire district, has been busily engaged with informations against colliery owners and managers, for failure to comply with the provisions of the Mines Inspection Act. Amongst those fined were Mr. Gardner, of Pontesbury, 4*l.* 4s. 8d.; Mr. Bennett, 5*l.* 10s.; Mr. R. P. Eddleston, 2*l.* 8s. 4d.; Mr. Pearce, manager for Mr. W. O. Foster, M.P., 1*l.* 10s. 4d.; John Anstice, of Madeley Wood Colliery, 27s.; and George Hussey and George Lloyd, of the same colliery, 1*l.* each. Mr. Henry Gardner was charged, firstly, with not having produced plans to the Inspector of Mines on his visit on Nov. 18; secondly, with not having an indicator to the engine; and thirdly, for not having rules for the guidance of the miners. Mr. Thomas Bennett appeared in answer to four summonses, in which he was charged—firstly, with not having produced plans to the Inspector of Mines on his visit on Nov. 18; secondly, with not having a break to a steam-engine used for lowering and raising persons into the mine; thirdly, for not having rules for the guidance of the miners; and, fourthly, with not having a proper steam-gauge to a boiler. Mr. R. P. Eddleston appeared in answer to three summonses, in which he was charged—firstly, with not having a break to a steam-engine used for lowering and raising persons into the mine; secondly, with not producing plans to the Inspector of Mines on his visit on Nov. 18; and, thirdly, with neglecting to provide a fence to an old shaft. Mr. Pearce had neglected to give notice of an explosion, which resulted in the death of a man, within 24 hours of its occurrence. The case of John Anstice deserves particular mention; the charge against him was similar to that against Mr. Pearce, but Mr. W. R. Anstice, in reply, complained that the regulations threw all the responsibility upon the masters, while the men, really guilty of the neglect, went scot-free; and it is to be regretted that Mr. Wynne stated that he thought there was a discrepancy, and that if the coal and ironmasters would meet and pass a rule, he would endeavour to get it passed by the Board of Trade. This is the worst step that could have been taken by the Government Inspector, who certainly needs to be reminded that at the instigation of Lord Ravensworth, the masters' advocate in the House of Lords, it was made *permissive only* for the masters to supply the men with copies of the rules for the guidance of those in the pit; it would, consequently, be unjust to make the men responsible for the observance of rules which, perhaps, they have never carefully read.

We have had a specimen of a safety-lamp exhibited to us this week, which appears to be superior in construction to those in ordinary use; and although comparatively new in England, it has long been used on the Continent, and has superseded all others. It somewhat resembles a Clanny, having a glass without a gauze at the bottom, so as to bear any degree of heat without breakage; at the top is fixed a gauze guard, and through it a tube or chimney, which causes a draft, and carries off the heated air, which the combustion of the lamp generates; its action assimilates with the lamp known as the Georgy, having a current of air through the tube, which, in presence of foul air, extinguishes the light, so that no danger can arise from its coming into contact with explosive gases, whilst the flame gives much more light than the ordinary lamp.

The lead mines of Derbyshire appear to be somewhat in the same position as noticed last week. The directors of the North Derbyshire are taking proceedings against the defaulting shareholders, to recover the arrears of the calls, and amongst them they have the unpleasantness of suing one of their own body, who has always been a noisy and discontented member. The Share Market is dull, and nothing of note doing in mining shares this week.

REPORT FROM MONMOUTH AND SOUTH WALES.

JAN. 30.—As stated in last week's Journal, the proprietors of the Abercarne Colliery have made another vain attempt to start the pit. On Saturday eleven men, named Evan Morgan, Isaac Ellis, Moses Crew, James Preffett, Thomas Kenvis, Robert Chambers, Samuel Selby, Thos. Stafford, Rees Pugh, Isaac Butler, and George Royal, were charged with having unlawfully, by threats, force, or intimidation, forced David Kenvin and others to depart from their employment at Abercarne. Mr. Colborne, for the Abercarne Company, appeared in support of the charge, and Mr. Owen conducted the case for the defendants. Mr. Colborne, in opening the case, gave a brief history of the strike which has occurred for the last two months. On the 8th ult. six men were put to erect a flue, with the understanding that they should not be employed in cutting coal. They continued at their work until about 100 Risca colliers came up one day, and a consultation took place between them and the six men. Several meetings took place subsequently, and the result was that the men refused to continue with their work. Mr. Colborne held that these meetings amounted to intimidation within the meaning of the Act, and he quoted the decisions of Lord Ellenborough and Mr. Fowler in support of his opinion. The proprietors of the colliery had already lost 8000*l.* by the stoppage, and he asked the magistrate to grant them that protection which the law ought to afford. The evidence was then proceeded with, and several witnesses were called, but none of them proved anything definite against the defendants, except that they were present at one of the meetings. There was no hooting, or any violence used. The magistrates did not think the case proved, and the Rev. T. Pope, in discharging the defendants, made a few exceedingly appropriate observations, which it is to be hoped will have their due influence on the men. He said the men had a perfect right to meet peaceably and discuss the value of their labour, just the same as the masters met to arrange the price of coal. They must, however, remember that they were liable to the severest punishment for any attempt to coerce their fellow-men to a certain course of action. Mr. Colborne said the Abercarne Company were desirous of proceeding with their work, and any charges of intimidation or assault would be strictly followed up by him on their behalf.

The works of the district are proceeding but slowly. Aberdare seems to be the most flourishing of the coal and iron valleys. There the Aberdare Iron Company are showing great spirit in carrying on their works, which, should it continue to progress as it has done for the last year or two, will soon be the largest ironworks in the world. The colliers at Messrs. Rhys and Co., Cwmdare, struck a few days since, but an amicable arrangement was afterwards effected between the masters and the men, and the latter returned to their work. Messrs. Price's pit, at Aberteiery, have been nearly at a complete stop for the last three weeks. The reason of this unfortunate stoppage has not transpired, but it is rumoured that the pits will shortly pass into other hands.

At the Bristol Bankruptcy Court, on Monday, the motion for winding-up the Pentreguinea Fuel Company (Limited) was heard before Mr. Commissioner Hill. Mr. Press produced an affidavit of the service of the petition on the registered public officer of the company, and of the insertion of the advertisements in the various newspapers ordered by the Court. The petition stated that more than three-fourths of the capital of the company was unavailable, that the company was unable to pay its debts, and that it had for some time ceased to carry on business. His Honour: What do you mean by the capital being unavailable? It seems a new term.—Mr. Press: Suppose the capital was locked up. The petition was presented by four out of the ten contributors of the company, and he represented the other six, and he was instructed to appear and consent to the order for winding-up being made.—His Honour: Then it is winding-up by consent; —Mr. Press said it was not voluntary, but a winding-up in Court by all parties. He then stated that there was a provision in the Act enabling the Court to stay all further proceedings in any action pending against the company, and asked for an order for that purpose, and also for a meeting for the appointment of an official liquidator to act with the official assignee.—His Honour said the application for an order to stay proceedings in pending actions would require consideration. Could a company, by agreeing to wind-up, get proceedings pending against it stayed?—Mr. Press said that one of the sections of the Act gave such a power to the Court, whenever the company was unable to pay its debts (which was the case here), or whenever the capital of the company had become "unavailable," so that the word used in the petition was the same as that used in the Act.—His Honour: Does it say how the capital has become "unavailable?" You are asking for extraordinary powers.—Mr. Press held that in the case of an ordinary bankruptcy the Court would make such an order.—The Commissioner said this was a limited company, which materially altered the case. His Honour suggested that the only course open was to grant a rule, calling upon the parties to the actions to show cause why all proceedings should not be stayed. After some discussion, the further hearing of the case was adjourned to Thursday.

The Hartley catastrophe is the universal theme of conversation and discussion in this as well as all other parts of the kingdom. Meetings have been, or are about to be, called in nearly every town, and the greatest sympathy is shown by all classes towards the unfortunate widows and orphans. It is expected that the subscriptions from this district, taking into consideration the depressed state of trade, will be exceedingly liberal.

Evan Davies, a boy eleven years of age, was killed in the Llanerch Colliery, Llansamlet, on Tuesday, by being caught by the chain of the horse-whim. He was dreadfully crushed, and died within a few minutes. An inquest was held on Wednesday, and a verdict of "Accidental Death" returned.—John Thomas, a door-boy, employed at the Plymouth Pit, the property of Mr. Anthony Hill, was suddenly killed on the 25th inst. by a fall of roof.

ABERDARE, JAN. 28.—The statistical returns of the quantities of coal raised in this district for the quarter ending Dec. 31, have just been issued; from which we are glad to learn that a material increase upon the past quarter has taken place. The total quantity raised was 474,619 tons, against 419,116 tons the preceding quarter, or an increase of 55,503 tons. The great increase was in the export trade, no less than 43,970 tons of the increase finding their way into various shipping ports. Large quantities of the Aberdare coal now find their way into the port of Llanelly, where upwards of 400,000 tons of coal were exported during the year 1861, the greater part of which was sent to France.

THE MANCHESTER GEOLOGICAL SOCIETY.

DISCUSSION ON THE HARTLEY ACCIDENT.

At the monthly meeting of this society, held at the Museum of the Natural History Society, on Tuesday, there was an unusually good attendance. Mr. JOSEPH DICKINSON, President, and Government Inspector of Mines, occupied the chair. Mr. J. Taylor, jun., and Mr. Joseph Goodwin presented some geological specimens to the society, and thanks were voted to the donors. Mr. ANDREW KNOWLES read a paper on "The Bank Top and Hagside Pits, and the Proving of Ganets." This colliery is about a mile from Bury, and the pits are 130 yds. and 160 yds. deep respectively; but there is nothing of unusual interest in their geological structure. A vote of thanks was given to Mr. Knowles for his practical observations, and a discussion followed.

Mr. JOSEPH GOODWIN then read a paper on the "Ventilation of Mines," remarking that the recent catastrophe at the New Hartley Pit had called forth the sympathies of nearly every subject within the British realms, and was exciting the minds of all engaged in the trade. It might not, therefore, be out of place to consider how far it was safe to trust to a bratticed shaft for ventilating coal mines. The system of working a colliery with only one shaft presented an unfavourable aspect from every point of view. It exposed to great risk both employer and employed. If an unlooked-for occurrence happened (as in the recent accident), what human power could render assistance to the unfortunate victims of such a system. Some of the highest authorities had condemned the working of a colliery with one shaft; and amongst these were the illustrious George Stephenson, and that friend of the miner, James Mather. Sudden "outburst of gas" was a very vague and indefinite term; and, when such occurrences took place, every scrap of information should be obtained respecting them.

Mr. E. W. BINNEY said the system of trusting to one shaft had been condemned for the last twenty years. Some two years ago he himself was advised to sink a shaft 100 fs. deep with a brattice, but he refused to take the responsibility. The failing of a beam, like that at Hartley, was a kind of mishap that could not be anticipated, and was not likely to occur again for many years. But wherever these brattices existed there was a likelihood of accident. The outlay in forming such a pit might at first sight appear to be small, but a pair of pits, in the end, were much cheaper. In Scotland, the patching of these brattices was a source of constant expense.

The CHAIRMAN observed that as the sad occurrence at Hartley had been brought before the meeting, it would be satisfactory to them, as gentlemen largely interested in mining operations, to know that the Government were really before the public in the matter, having already made full arrangements to ascertain to what extent the brattice system was used. In the course of a few days it would be known how many brattice pits there were in the country, and what proportion they bore to the whole.—Mr. JOHN FLETCHER said that some of the daily papers were making a monstrous attack upon the Inspector in the North, as if he could compel the owners of the colliery to sink another shaft.—The CHAIRMAN said there was no doubt that the system had received the sanction of some able mining engineers. He himself had always been an uncompromising advocate of two shafts. In many instances he had been successful in putting a stop to the brattice system. Some people denied *in toto* that any outbursts of gas ever took place. For many years he was in the habit of visiting coal mines daily; but it was a long time before an outburst came under his notice. Since then numerous instances had presented themselves to him. Only a few days before their last meeting there was a case clearly proved by evidence on oath. Safety-lamps should be used in all mines where such occurrences were probable.

Mr. T. WYNNE (Government Inspector for Cheshire, &c.) thought that "blowers" were often made an excuse for bad ventilation. He could bear witness that outbursts of gas came on when they were least expected, and that nothing but safety-lamps could provide against danger. His opinion was that nothing was safe but two shafts. Although, happily, but few accidents had been occasioned by the falling down of a beam, numbers of sad occurrences could be traced to the single shaft.—The CHAIRMAN said the Page Bank accident, in Durham, where about 80 men were shut up, ought to have been a death blow to these brattice pits. There was no doubt that the affair at New Hartley would be closely investigated. But to those who were merely looking on outside, the root of the evil appeared to be that there was only one entrance to the mine. As had been remarked by one of the newspapers, the owners of all such pits were not so careful as the wild animals who burrowed in the ground, and generally provided more than one place of egress.—Mr. GEORGE CHARLTON hoped that all persons interested in the trade would use their influence in discountenancing this system, respecting which there appeared to be but one opinion. Where a vein of coal was found, and money could not be raised to work it by a couple of shafts, the mine ought to remain unworked until its value was sufficiently high in the market to warrant the proper course being adopted. He was glad to find that the Home Secretary had issued a circular to all the Inspectors of Mines, calling for an investigation. Mr. Dunn, the Government Inspector in the North, had both publicly and privately recommended the adoption of two shafts. The words "outbursts of gas" in many instances ought to be substituted by "sudden suspension of ventilation."—The CHAIRMAN said there was no doubt it was most vicious to use the safety-lamp instead of ventilation; as an adjunct it was most valuable.—The thanks of the society were presented to Mr. Goodwin for the valuable paper he had read; and to the President for occupying the chair.—The proceedings then terminated.

SELF-HELP FOR THE PITMAN.

We have noticed in recent numbers of the Journal the formation of the "National Association for the Relief of British Miners," whose objects are to secure the adoption of measures for preventing accidents in coal mines; to see that the management of such mines is placed in the hands of competent persons, and to collect funds for the relief of those families whose bread-winners are taken away by the fatal choke-damp or the other deadly evils to which the miner is subject. All these objects are highly laudable, and if the persons who have undertaken the work of promoting them be men in whom the public and the parties interested can place confidence, and if the plans they propose be sensible and free from crotchets, one may have some hope of the eventual success of the movement. We leave the ideas of the association on Ventilation to be discussed by our mining engineers, and turn to the exposition of its views on the relief of the destitute. We there find that it is proposed to provide both for calamities like that at Hartley, and for the miner incapacitated by accident from following his occupation. The public are to furnish the association before hand with the means of affording relief to cases of magnitude, such as Hartley, Risca, and Lund Hill, while a universal penny miners' subscription is to provide the means for giving assistance to smaller cases of accident and disaster. Our own opinion is that neither the one nor the other is likely to be carried out. People will not subscribe towards a calamity *in nubibus;* one penny a week from every pitman cannot be collected.

If the association be really in earnest in this department of the labour it has imposed upon itself, let it promote the establishment of a combined life and accident insurance society, from which only those shall derive benefit who appreciate its advantages, and subscribe to its funds; and let it leave the Hartley's, the Risca's, and the Lund Hill's to the care of a benevolent and sympathising public. There is no such society in existence, and the want of one has been felt for years; several philanthropic individuals have tried to supply the want, but hitherto none of them have been successful. The best of the many schemes that have been proposed for the relief of the British miner was the Miners' Provident Association. It was also the nearest to positive success; indeed, would have attained thereto, but for the indifference of the coal owners. The National Association in this enterprise therefore, will find the ground already broken; it has only to step in and avail itself of the materials which others have left behind. It may spare itself much labour in the shape of agitation, for the pitmen of the North are already familiar with the principles of the "Provident"—they helped to frame the rules themselves, and the society met with their almost unanimous approval. The originator, Mr. John Baxter Langley, who devoted weeks and months of unrewarded labour to the preparation of the rules and tables, attendance at public meetings, lectures, and waiting personally upon members of the coal trade, is editor of the *Preston Guardian*, and can easily be communicated with. Everything is fashioned to the hands of the association, all that is wanted is a guarantee capital of about 2000*l.*, which Mr. Langley tried to obtain from the coalowners, but which the "National" can, perhaps, collect from its friends at Bayswater and elsewhere.

At the time when the Miners' Provident Association was under discussion we carefully examined and expressed our entire approval of the plan, against which, indeed, the coalowners themselves had nothing to say, but that they could not afford to subscribe the guarantee capital. We have seen no reason to alter our opinion, and as the gentlemen forming the "National" are not very generally known to the coal trade, and, therefore, may be unacquainted with the principles upon which the "Miners' Provident" was to be conducted, we take the liberty of furnishing them with a brief outline.

The object of the Provident was to provide, not for cases of sickness, which are already dealt with by the Oddfellows, Foresters, and kindred societies, but against "the result of accidents connected with coal pits and mines, the protection of widows, fatherless children, orphans, and superannuated or maimed persons." And this most desirable object was to be effected, not by a universal penny subscription, upon whose collection no reliance could be placed, but by the application of the principles of *Life Assurance and the Law of Average*. In order that no delay might arise in getting the society into operation, nor any disappointment occur from an undue pressure upon the funds during the early stages of the society's existence, it was proposed to raise an extraordinary fund, to be called the Guarantee Fund, bearing the same relations to the operations of the society as the guarantee capital bears to a mutual life assurance company. To this fund, amounting to not less than 2000*l.*, the masters, employers, and others were invited to contribute, and, in case of forfeiture by the society, the whole of the funds so collected were to revert absolutely to the committee of the coal trade. (The ordinary funds and subscriptions, it will be understood, were to be furnished by the payments of members.) The drafts upon the guarantee fund were not to be made for any other purpose than preliminary expenses, the advancing temporarily of money to pay losses incurred while the ordinary subscriptions were insufficient to meet such losses, or when there might be a deviation from the averages upon which the table of rates was based. At the same time, the guarantee fund was not to be applied to any *permanent* deficiency arising from too low rates of payment to the benefit fund; any advance made on the ground of insufficiency of the ordinary payments was to be held as a debt due to the guarantee fund, until the rates were corrected, upon which being done, the guarantee committee might make a special grant, and cancel the debt, provided always that the fund was not reduced below the minimum of 2000*l.* Provision was made, too, that this fund should not be appropriated or divided, or even re-distributed, unless the society itself were broken up; so that it could never be applied either to support or counteract strikes and combinations of workmen, or be appropriated to any political purposes, by either masters or men. As elaborate series of rules, and most carefully-prepared statistics, were drawn up, and if the coalowners could have been induced to assist in raising the guarantee fund, as it was expected they would, the society would have been in operation now, and numbers of persons permanently maimed and disabled within the last year and a half have been in receipt of a small weekly income, and several widows and children provided for. The coalowners, or at least many of them, admitted the soundness of the principles upon which the society was based, but urged that they already subscribed largely to charitable purposes, forgetting or losing sight of, the fact that the establishment of the Miners' Provident would gradually have reduced the number and amount of their gifts, and have spared them all the trouble of distribution.

Let the National Association take this matter in hand. Disasters like those at Lund Hill, Risca, and Hartley, are generally provided for by spontaneous public benevolence as soon as the news of calamity becomes known, and the funds so subscribed are generally distributed much better by local committees than by gentlemen from a distance. It is the many isolated cases of death and permanent injury from falls of stone, breakage of machinery, &c., that most loudly call for assistance, for it is only they that are likely to be neglected. The collection of a penny a man throughout the mining district is a Quixotic enterprise, which can yield no settled and reliable income. Besides, the pitmen are an independent class of men. They have no confidence in uncertain projects and dislike sending round the hat every time that a life or a limb is lost in the pit

They would prefer a society into which a man could pay a trifling sum per week, with the certainty that out of his own earnings he had made some slight provision for himself in case of serious accident, or for his widow and young children in case of death. This was proved by the enthusiasm with which the pitmen of Northumberland and Durham supported the Miners' Provident Association—the first really feasible attempt to give them the same means of helping themselves which is afforded to most other classes by ordinary Life and Accident Insurance Associations. In the interest of our colliery operatives we invite the managers of the "National Association for the Relief of British Miners" to investigate the rules and tables of the unorganised Miners' Provident Association; and if they understand the character of the pitman, as gentlemen taking the high position of the National ought to understand it, they will appreciate our remarks, and discover in the Provident scheme what we believe to be the only means of successfully making provision for the necessities of the pitman and the helpless ones dependent upon him.

VENTILATION OF COAL MINES.—We understand that through the influence of Mr. T. Young Hall, of Newcastle, experiments will be made at Montague Main Colliery, Scotswood, with a view to test the value of Mr. Charles Colwell's system of ventilation by *propulsion* instead of *suction*. Messrs. Colwell, Towers, and Dennys have been busily engaged during the week in advocating the advantages of the National Association for the Relief of British Miners, and are well satisfied with the extent to which their efforts have been appreciated. Mr. Colwell anticipates that by changing the system of ventilation from *traction* to *propulsion* he will be enabled to render several million cubic feet of deleterious and explosive gas harmless, and in writing of the intended experiments says: "I have seen the pit, or rather its present arrangements, the work being stopped at this moment; and should the owner's consent be obtained, as it doubtless will be, it would require but a few hours' preparation, and that at a cost only of a few shillings, to determine whether colliery explosions are preventable, as I believe them to be, or that the propositions of your humble servant emanate from the brain of a mad enthusiast. In fact, it is simply a question whether the known law of pneumatics, if applied as ordained by Nature, is superior to the various suppositions of those who now appear to reverse the order of natural philosophy in their mode of ventilating collieries. I boast of nothing beyond common sense, and take Nature's laws for my guidance."

CONVICTIONS AGAINST A COLLIERY MANAGER.—At the Barnsley Court House, on Saturday, before Messrs. W. S. Stanhope and T. Taylor, James Herbert, the agent and underground viewer at Messrs. Hall and Stone's High Royd Colliery, at Nether Hoyland, again appeared in answer to the summonses issued against him by Mr. Charles Morton, Inspector of Mines, the hearing of which had been adjourned from a former day. Mr. Skipworth, of Wakefield, again conducted the prosecution, and Mr. Shaw (barrister), instructed by Mr. Hamer, of Barnsley, defended the accused. Herbert was now charged with the violation of a special rule of the colliery, which requires the underground viewer or his deputy to see that locked safety-lamps are used, and naked lights excluded whenever and wherever danger from fire-damp may reasonably be expected. On Oct. 5 last an explosion of fire-damp in this pit caused the death of one man, and the serious injury of another. For some weeks previously the defendant knew that some of the workings were in a "fiery" condition; but he neglected to ventilate them, and he carelessly allowed naked lights to be used there. The result was the fatal accident above mentioned. Mr. Skipworth urged the importance of observing this prudent regulation about safety-lamps—especially in a district where so many dreadful explosions had occurred; and he intimated that the Inspector had for some time delayed summoning the defendant, in the hope that the colliery owners themselves would prosecute him, or at least dismiss him from their service. They, however, had retained Herbert in office, notwithstanding the severe censure pronounced against him by the coroner and jury at the inquest. The Inspector had, therefore, no alternative but to institute these proceedings before the magistrates. After hearing the evidence, and the reply of the defendant's counsel (who contended that the new rules had not come into force on the day in question), the Bench decided to convict.—The next charge was that the air-courses in the thick coal bed were not made and maintained 25 square feet sectional area, as required by special rule. Some of the air-ways were little more than half the prescribed size; and although the Inspector had recommended them to be enlarged his advice was disregarded. Mr. Shaw replied that the air-courses complained of were in the same state when Herbert was first employed at the mine; and that he ought not to be held responsible for the negligence of his predecessor. The Bench, however, decided that the defendant was liable.—Another charge was then preferred against Herbert for the neglect of a special rule, which requires that the doors in the main air-ways shall be "checked," or "doubled." The effect of leaving open one of the unchecked doors in this pit would be to take away the ventilation from a large portion of the workings; and thus another disastrous explosion might at any time ensue. The defendant having been convicted in this case also, the Inspector withdrew other informations that had been laid against him. The Chairman then said that the offences which had been proved were very serious; particularly those relating to insufficient ventilation, and use of naked lights in places known to contain fire-damp. The Court fined the defendant in two cases 10*l.* each, and in the remaining three cases 1*l.* each (altogether 23*l.*, including costs); or in default of payment three months' imprisonment, with hard labour.

CAUTION TO COLLIERY PROPRIETORS.—At the Caerphilly Police Court, Messrs. Owen, Downing, and Jones, the proprietors of the Mynyddmayo Colliery, near Cardiff, were summoned for not having given notice of a death in their colliery to the Secretary of State, and to the Government Inspector for the district. Mr. Stephens appeared for Mr. Evans, the Inspector, and Mr. Bird for the defendants. It appeared from the evidence given that, on the 14th of December last, a fatal accident occurred in the colliery, when a workman was killed by being run over on the incline. No notice of such accident was given, as required by the Act of Parliament. The magistrates considered the case proved, and fined the defendants 40s. and costs.—The same gentlemen were then summoned for not having the general rules posted up in the office, or other conspicuous part of the works, and also for not having established any special rules, as required by law. The Bench inflicted a nominal penalty of 1s. in each case, together with costs.—*Cambrian.*

ASSOCIATION FOR THE PREVENTION OF STEAM-BOILER EXPLOSIONS.—At the last ordinary monthly committee meeting, held at the offices, Corporation-street, Manchester (Mr. William Fairbairn, F.R.S., in the chair), Mr. L. E. Fletcher, chief engineer, presented his monthly report, of which the following is an abstract:—"From the nature of the defects discovered during the last month, I would wish to take this opportunity of calling the attention of the members to the subject of CORROSION, which is often stealthily eating away the strength of boilers entirely unsuspected; and I wish to put our members on their guard on this point, because I find that frequently when a boiler is discovered to be in a corroded state, even though it may have arrived at an advanced stage, and be on the point of rupture, still the discovery proves quite a matter of surprise to the owner, who expresses astonishment that his boiler should have been so affected. The fact is, however, that no boiler allowed to pass a whole year without being examined thoroughly' (*i.e.*, both inside and outside), so that the condition of all the plates may be ascertained on both their surfaces, can be pronounced as free from corrosion, or worked without risk—more in some cases, of course, than in others; in illustration of which I may state the following:—An ordinary internally fired boiler had been thoroughly overhauled, re-seated, and left in good repair two years ago, the association not being afforded the opportunity of making the regular annual 'thorough' examinations during that time. This boiler was set on a mid-feather, and, on being scaled a few days since, a hammer was put through the plate at the bottom, which, on examination, proved to have been so much eaten away as to have become at that part as thin as a sheet of paper. On going up the pipes, I found that the plates were affected, not at one place only, but throughout the whole length bearing on the mid-feather, and, on removing some of the bricks, the plate was seen to be quite crumbling away, and at least a quarter of a pint of oxide was readily collected from a small surface only. In one or two places, where there had been small leaks at the ring-seams (which so commonly happen when the feed, without being previously heated, enters the boiler immediately at the bottom), the mid-feather had ponded the water, and held it in contact with the plates, in which it had cut complete channels, as well as eaten away surfaces of considerable area, while internally the plates were quite 'hogged' in places over the mid-feather, and the boiler was evidently in a most unsafe condition, so that a thorough repair (now in progress) was necessary. The danger of setting boilers on mid-feathers has for years past been pointed out by this association, and the practice, I trust, will soon be entirely discarded. Explosions caused by mid-feathers are likely to be of the most destructive character, since the rent would not confine itself to a single plate, but extend throughout the whole of the weakened part, acting nothing 'skies' a boiler more effectually than a longitudinal rent at the bottom. I should add, that it is by no means intended that the service rendered by this association should diminish the exertions of the steam users' own engine attendants; but, on the contrary, that it should stimulate them to greater care. Thus the fact of our inspectors getting inside each boiler annually, as well as going up the flues to make 'thorough' examinations, should by no means stand in the place of this being done by the owners' own engines at least twice a year in addition. To leave the detection of corrosion to the sweeps who clean the flues, although sometimes allowed to be the case, is, I think, what no engineer would do, either having his master's interest at heart, or regarding his own safety, as he should. Three explosions have occurred during the last month to boilers not under the inspection of this association, each of which has been attended with fatal consequences, in one case as many as four men being killed, and several others wounded. One of these explosions happened to the boiler of a portable agricultural engine; another to a bath or kitchen boiler, in which the taps in the inlet and outlet pipes were both foolishly closed at the same time, so that, there being no safety-valve, the pressure was bottled up as in the case of the Great Eastern water-heater, and explosion became inevitable. A third explosion occurred to a colliery boiler, of plain cylindrical egg-ended construction, 40 ft. in length, 5 ft. 3 in. in diameter, the plates being ⅜ of an inch in thickness, and the working pressure 30 lbs. per square inch. The boiler was fitted with two sufficient safety-valves, and two floats, one of which had a low water alarm whistle; the explosion was occasioned by the plates over the furnace becoming overheated (although there was no evidence of deficiency of water), the boiler being rent into four pieces, each of which was blown a considerable distance. The cause of the overheating was attributed to the sedimentary character of the water; and I call the attention of our members to this fact as another illustration of what has been previously stated, that incrustation should not be regarded merely as a matter of inconvenience, but frequently of positive danger. There are other points of interest connected with this explosion, the consideration of which space compels me to defer to another opportunity."

CIVIL ENGINEERING.

Manual of Civil Engineering. By W. J. MACQUORN RANKINE, C.E., LL.D., F.R.S., &c. London: Griffin, Bohn, and Co.

Another valuable addition to our mechanical literature has just been made by the publication of the third volume of Prof. Rankine's series of practical manuals on civil engineering and mechanics—the Manual of Civil Engineering, now before us, being the cheapest encyclopædia on the subject which has yet appeared, though for utility and completeness it is unsurpassed by any. The elaborate character of Prof. Rankine's works is well known; but although the last volume reaches nearly 800 pages, we cannot see an instance in which a fact could be more briefly stated, or an explanation more clearly given. The whole work is arranged in a very systematic manner, and any portion of the information given can be referred to with the greatest facility. The three parts into which the book is divided comprise respectively—engineering geodesy, or field-work, including those branches of practical operations which depend on geometrical principles alone—that is to say, surveying, levelling, and the setting out of works; materials and structures, in which the description of earth, stone, timber, and iron employed by the engineer are treated of, and the methods of forming them into structures of different kinds, such as excavations, embankments, roads, bridges, explained; and combined structures, in which are are given the details of the combination of principles laid down in the construction of roads, railways, canals, sea-defences, harbours, &c. Prof. Rankine's Manual is one that may be read with profit by all connected with the engineering profession, no matter to which branch they may belong, and we opine that if the work, which by its price is placed within the reach of all, were carefully studied by mine managers they would be enabled to pursue their avocation with greater satisfaction both to themselves and their employers.

MINING NOTABILIA.

[EXTRACTS FROM OUR CORRESPONDENCE.]

WHEAL LUDCOTT sold, on Jan. 13, 1 ton of silver ore, for 694*l.*

At NORTH DOWNS, in the 60 fathom or bottom level, the men have cut in south, and the lode immediately produced lumps of yellow copper ore; they were prevented proceeding further by the quantity of water let down, and the mine is now drained up to Bennett's cross-course; there are two winzes being sunk, worth 100*l.* per fathom. The sale of ore realised more than 2000*l.* Altogether this is opening up a most splendid property.

At NORTH TRESKERBY, the lode in the sump-shaft has been disordered by a horse of killas, but the lode is now forming again, and is expected shortly to be as good as ever. Other parts of the mine are looking much better.

NORTH ROSKEAR is not looking so well; there has been a failure in the timber securing the top of the engine-shaft near the surface, and the water in to the bottom working level west, the 194. In the 184 west there is a promising lode, producing 2 tons of copper, worth 10*l.* per ton. The 174 ends west, both on the north and south parts, are poor, as also the 164, 152, 140, and 90 west. Unless considerable improvement generally takes place the shares must sensibly decline; they have changed hands at 23*l.*

NEW SETON is looking well, and likely to advance on its merits; shares are about 65*l.* each.

NORTH DOWNS has improved in the 60 fm. level.

COPPER HILL.—This mine (formerly a part of the celebrated Wheal Buller) appears at last to have made a start. At the meeting, on Tuesday, the accounts showed a profit of 1160*l.*, and a dividend was declared of 2*l.* per share (512*l.*), leaving a credit balance of 244*l.* Copper Hill adjoins Wheal Buller, Wheal Basset, and East Basset—mines which have declared thousands of pounds in dividends. At Michell's very near to where in East Basset they had one of the richest bunches of ore ever met with even in the Carn Brea locality, they have a lode worth 6 tons of rich ore per fm., with every indication of a further improvement. According to the report read at the meeting the ends, stopes, and winzes will produce about 37½ tons per fathom. This mine is under the management of Messrs. S. and R. Davey, of Redruth, pursers of the celebrated Wheal Buller, and their family hold a large proportion of the shares.

WHEAL MESSER.—There is a report that this mine is shortly to be worked with greater vigour than it has for some time past. Why this highly promising sett should have been so long neglected one can scarcely imagine: perhaps it may be said because it has been worked two or three times with ill-success; I answer that it has never worked long enough to half prove it. I believe I am correct in saying that it is not over 40 fms. deep. Now, I ask, what trial is that, supposing there had been no mineral raised? but there has been thousands of tons raised. Others may say because it is a poor district; who can tell but what all the other mines have been served as bad as Messer? The reason is this—there are some shareholders who expect that as soon as the mine begins to work it must be remunerative, and because it is not so they are disheartened, perhaps, before they have laid out 2s. 6d. per share. It is for want of capital they have not been successful. I firmly believe that if the original shareholders had continued working under the able management of Capt. Poiglase, by this time it would have been a dividend mine. So you see by having no heart, and but little capital, both the mine and district gets a bad name. It is a notorious fact that most of our best mines are those which have paid up the most capital in exploration. By having capital to the amount of 10,000*l.* (for it ought not to be a farthing less), with able management combined, I think the time is not far distant when Wheal Messer would be on the list of dividend mines. It would be optional whether it should be stocked at once or by instalments—(say) let it be divided into 10,000 shares, at 1*l.* per share, 5s. to be paid at the purchase, and 5s. again in three or six months, as needed; then, I have no doubt, this present company will be more successful than the original one.

NORTH HAFOD.—The accounts of the appearance of the lode in the engine-shaft sinking in North Hafod are very favourable. The lode shows all the indications of becoming rich peculiar to the Frongoch lode; and, with these signs of ultimate success, an increased show of ore in the vein as it deepens.

WHEAL BASSET AND GRYLLS.—This mine still continues to open out satisfactorily, and in a very short time must attract much attention from mining speculators. Shares are scarce to be got, and the mine is little known on the London market. Shares are quoted at 10*l.*, 10½*l.*, but few (if any) are to be obtained.

ST. IVES WHEAL ALLEN still looks well; the 10, east of Roderick's shaft, being 2 feet wide, and worth 20*l.* per fm. In the 30, east of Geisler's shaft, the lode is worth 15*l.* per fathom. The stopes in back of the 50, east of Geisler's shaft, are worth 7*l.* per fm. In back of the 50, east of boundary winze, the lode is worth from 8*l.* to 10*l.* per fm.; and in back of 20, east of Louisa's shaft, the lode is worth from 4*l.* to 6*l.* per fm. This mine adjoins St. Ives Consols, which has divided a very large sum, and is still making profits. On the other side of Wheal Allen is Rosewall Hill and Ransom United, which is opening out exceedingly well, and the 6000 shares of which are worth from 3*l.* 10s. to 4*l.* each, and have been above 6*l.*; while St. Ives Wheal Allen is in only 1024 share, and 7*l.* 6s. 3d. per share paid; the mine being well found in machinery for pumping, stamping, &c., and regular sales of tin commenced.

PROSPER UNITED.—The lode in Hill's shaft is worth 50*l.* per. fm., and the other places either improved, or equally valuable as last week. The first sampling of copper ore—106 tons, took place this week, which is a good commencement, and we may look for larger quantities monthly before long, besides good parcels of tin when the steam-stamps are ready.

WHEAL HARRIETT.—The lode in the 115 end has improved, now worth 15*l.* per fm., with indications of further improvement.

GURLYN.—At Wheal Fox they have connected a run of flat-rods from their pumping-engine to Wheal Fox shaft, and dropped pumps in it, having pumped out the water 20 fms. under the adit level; and from the bottom of this shaft two levels were driven by the former workers, east 14 fms., and west 13 fms., on a kindly looking lode, 2 ft. wide, and will produce for the whole distance tin worth 3*l.* 10s. per fathom, also good stones of rich yellow copper ore, blende, &c. The lode in each end seems to be divided into two parts, one part producing tin and the other copper. I consider this part of the mine a kindly speculation, being to the east of a large cross-course, and by a cross-cut from the 20 south 14 fms. Rich's lode can be intersected also to the east of the cross-course. These lodes all form a junction going eastward, and I consider the eastern part of the sett to be favourable as a piece of mining ground.

ABERNANT.—The engine-shaft in this mine is sinking in a rich lode of silver-lead ore, yielding 25 cwts. per fm., and all the ground opening is very rich for ore.

TRELABNAS UNITED MINES.—This sett has been secured by Capt. Thos. Faull, who is now engaged in making the necessary explorations for testing its value. The traditions of it which have been handed down for the last 100 years are encouraging, and the operations of the ancients appear to have been extensive. We shall publish periodical reports of Capt. Faull's progress.

ST. JUST UNITED.—The directors, it appears, are determined to prosecute this valuable property with vigour, as they are to have the 36-in. cylinder steam-engine recently purchased erected immediately, and get the mines drained throughout; and that a contract has been entered into by Messrs. Eustice and Son, engineers, of Hayle, to get it to work. All the necessary pitwork, fly-wheel, and the stamping gear are also ordered, and to be delivered on the mines at a given time: such being the case, I must say great credit is due to the board for beginning to work in such a mining-like manner, as the old adage is—Time is money in mining.

WEST KAME.—We understand the shares in this undertaking are being rapidly taken up by influential parties, and that a first meeting will shortly be summoned. The engine-shaft is being sunk as fast as it can be. On the ground are 50 tons of ore that may be sent to market at a very short notice, and ore is still being broken. The mine has been inspected by Capt. Bailey, whose report appears amongst our usual Mining Correspondence.

LOCHWINNOCH CONSOLS.—No better proof of the confidence the directors entertain in the ulterior success and stability of the undertaking could be afforded than their decision to immediately expend the sum of 250*l.* in erecting a suitable dwelling-house for the manager on the mine. This measure is by many of the shareholders deemed ill-advised and premature, and has given great umbrage to some of their number; but as the whole management is vested in a board of seven only, and their veto is law, it cannot now be avoided, except by a special general meeting. We hear it is intended to call such meeting, for this and other special purposes; at all events, the directors would not take such measures unless their expectations and confidence were well grounded. They appear in all their proceedings to show a determination to do the work rapidly and effectually. The new shaft for the engine is being carried forward most energetically, and is being secured in the most substantial manner; pitmen, smiths, &c., accustomed to work of this kind have arrived from Cornwall, and we expect shortly to report considerable progress.

GOUROCK COPPER MINE.—The very severe weather has again prevented the work progressing as it should otherwise have done. The frame for the wheel is, however, now complete. The wheel will be on the ground and fixed in a few days, when the real work of the mine will be proceeded with. Saturday last was the pay-day, when many men attended, expecting the hands would be augmented; for the above reasons, however, such a measure was unnecessary. The place wears the aspect of business, and attracts a considerable number of visitors, notwithstanding the severity of the weather. The men and all parties concerned are in high spirits.

EFFECTS OF MINING ENTERPRISE.—At the village of Lochwinnoch, county of Renfrew, Scotland, application was a few years since made by the inhabitants to have the advantage of a money-order office granted; the Post Office enquiries resulted in an answer that the correspondence and probable returns did not warrant the establishment. Since the commencement of the copper mines in the neighbourhood, only twelve months ago, the number of letters posted and received, together with the number of applications for remittances of small sums by the miners, &c., have induced the authorities to constitute a money-order office without solicitation; this will be felt as a great boon by the whole locality, as the nearest post-offices for money orders were at Johnstone, Beith, or Paisley, involving a walk of at least six miles, or an additional charge of 3d. and a day's delay. Property, in land as well as houses, has considerably increased in value, the latter especially. The agents, as well as miners, have been necessitated to put up with very inferior accommodation, at prices far in excess of what are usually paid in mining localities. These things will remedy themselves in time. When the mines shall have been proved to be continuous in depth (which no practical man acquainted with similar deposits doubts), building new houses will be rapidly proceeded with. We fully expect to see Lochwinnoch to be in Renfrew what Camborne is in Cornwall. The mines at present being wrought are the Lochwinnoch Consols, West Kame, and the Calder Glen. The two former are sending off large quantities of copper ore, and erecting machinery. We hear of at least two more mines being commenced as soon as the spring sets in, the lodes having been discovered with ore at the very surface.

MINING IN VENEZUELA.—Accounts have been received by the mail of extraordinary discoveries of copper ore in the Aroa Valley: 400 tons of rich ore, averaging 35 per cent., have already been raised. The only means of conveyance to the coast, a distance of 60 miles, is by means of mules, a very expensive mode; but a company is about to be formed to purchase the land from the mines to the coast, which will not only double the value of the land passed through, but will enable the proprietors to realise a princely fortune, as the quantity of rich copper ore is said to be inexhaustible, and thousands of ton can be returned the first year without difficulty.

THE MINERALS OF TYNE AND LIDDESDALE.—A seam of coal 5½ feet thick is now ready for working in the Plashetts coal field. Already a number of colliers are located at the field, nine houses having been built. Two gentlemen from East Lothian have contracted with Mr. Jardine for the limestone on the farm of Thorlieshope, and will soon commence operations. Thus the mineral treasures on the route of the Liddesdale Railway will, in all probability, be made available throughout the district simultaneously with the opening of the line.

SUBMARINE BLASTING.—Before the Emperor of Austria returned to Vienna from Venice, he was present at this latter place to witness some experiments in submarine blasting. Two large cases were sunk before him to a depth of 14 ft. in the sea, each containing 400 lbs. of cotton-powder. The first was then exploded, and a large brig adjoining was blown out of the water to a height of 50 ft., and shattered to pieces. The second blew up another vessel as high, it was conjectured, as the tower of St. Mark. The experiments were considered quite successful.

DRESSING SLATES.—Mr. J. W. Greaves, of Port Madox, has patented an improved apparatus for dressing slates, whereby accommodation is afforded for two workmen at the same machine. The knives, or cutters, are mounted at a slight angle to the axial centre line of the machine upon a pair of holding discs. The cutting edges of the knives are in opposite directions, so that by imparting a circular reciprocating motion to the discs, the knives will alternately act upon and dress the edges of the slates, which are presented to them upon stationary cutters or knives at each side of the machine. The reciprocating motion of the discs and their knives may be derived from a revolving crank driven by a pulley and band, and acting upon a lever arm fastened on the main shaft, or by any other convenient mechanical arrangement. The different sizes of the slates are gauged by suitable gauges on each side of the machine.

IMPROVED PICKAXE.—A very ingeniously constructed solid pick is at present being manufactured by Messrs. Yates and Co., of Birmingham. The pick has no eye to it, and is so constructed that the handle can be fitted on in an instant, and when a pick is detached for repairs another of the same weight can be instantly put into the handle, even by a boy. The handle has a strong iron socket, into which the pick slips, and is keyed fast with a steel key. It is claimed that the amount of labour in using the new pick is much less that usual—the labourer being able to strike a much quicker and stronger blow without jar to the hand or risk. The pick is in use in the American army, and is especially applicable for colliery and mining purposes.

LEPAGE'S PROJECTORS.—Mr. Lepage, Paris, has just specified in this country, under a patent taken as a communication to Mr. Henry, patent agent, Fleet-street, a mode of increasing the illuminating effect of lights, by fitting very close to the light a lenticular disc, smooth on the side turned towards the light, and corrugated or undulated on the opposite surface, which may be either convex or not. These lens or discs he terms "projectors," to distinguish them from "reflectors," which diffuse light indirectly, whereas the projector distributes or diffuses the light directly. They are composed of transparent material, and may be so mounted as to be adjusted to the required height by screw and collar, or otherwise.

ELECTRICITY.—In forming a voltaic series for the purpose of obtaining an electric current for telegraphic purposes, Mr. D. G. Fitzgerald, of Cambridge-street, proposes to use the earth as one of the battery cells of the arrangement. He, therefore, places in electrolytic contact with the earth a positive and a negative voltaic element, at any required distance from each other, and he employs the voltaic couple in conjunction with an ordinary or any galvanic battery. He connects the positive element in the earth with the positive terminal of the battery, and the negative element in the earth with the negative terminal of the battery. One of these connections is established by means of a wire, through which signals have to be transmitted. The elements in contact with the earth may be similar to those contained in the battery cells, and similarly excited. He occasionally employs a voltaic battery in connection with the earth couple at both instead of at one of the stations. At the same time, Mr. Fitzgerald also provisionally specified a voltaic arrangement of the metal iron and a metallic salt, the acid of which has a greater affinity for iron than for the metal of the salt. The metal of the salt is precipitated, and forms a residue of commercial value. In order to confine the deposit to one of the plates only in each couple, the remaining plate is coated with a porous material. When a diaphragm is used, a mineral acid may or may not be used to excite the latter plate. In either case the plate upon which the deposit does *not* take place becomes the positive element, and the other the negative element.

TRACTOMOTIVES.—Mr. Benjamin Franklin Stevens, of Lancaster, U.S., has patented an improved form of traction-engine. The water-tank, &c., is placed within a roller placed at one end of the engine, and forming the substitute for the pair of driving-wheels. He claims both the combination of the traction drum driving and grinding-wheels, and the mode of supporting the water-tank.

THAMES TUNNEL COMPANY.—Receipts for the week ending January 25, 85*l.* 7s.; number of passengers, 20,484.

LONDON GENERAL OMNIBUS COMPANY.—The traffic receipts for the week ending January 26 was 984*l.* 8s. 8d.

HOLLOWAY'S OINTMENT AND PILLS.—The scrofulous and consumptive will find in these noble remedies the means of casting out the bad humours which originate and prolong their sufferings. The ointment should be well rubbed twice a day upon the skin, as near as possible to the part affected. It will penetrate and act most wholesomely and energetically on the diseased structure. It manifests a wonderful power in removing all taints from the blood, and, consequently, in curing a multitude of chronic ailments, which seemed to be almost irremediable. In all constitutional complaints, Holloway's purifying pills should be taken while the ointment is being used; both remedies will readily bring about a cure of scrofula, scorbutic eruptions, and ulcerations.

Miners' Association of Cornwall and Devonshire.

MINERS' ASSOCIATION OF CORNWALL AND DENONSHIRE.—The SECOND GENERAL MEETING of the association will be HELD at the New Hall, Redruth, on TUESDAY, February 4th, at Three o'clock P.M. precisely.

Previously to the general meeting, at Eleven o'clock a meeting of the Council will be held, for the purpose of deliberating on several important matters, and arranging the business of the year. ROBERT HUNT, F.R.S., Honorary General Sec.

DEVON KAPUNDA MINE (LIMITED), NEAR TAVISTOCK.—An important MEETING will be HELD at the Queen's Head Inn, Tavistock, on FRIDAY NEXT, the 7th Feb., 1862, at Six o'clock in the evening, when the ATTENDANCE of CREDITORS is PARTICULARLY REQUESTED.

CONNORREE MINING COMPANY (LIMITED).—Notice is hereby given, that a GENERAL MEETING of this company will be HELD at their offices, 46, Dame-street, Dublin, on Wednesday, the 12th of February, 1862, at One o'clock P.M., for the purpose of submitting the report of the directors, and statement of accounts up to 30th November, 1861.

Immediately after which, at the same day and at the same place, an EXTRAORDINARY GENERAL MEETING will be held, to appoint an auditor in room of Arthur Moore, Esq., who has resigned. F. W. GREENE, Sec.

N.B.—The transfer books of the company will be closed from the 6th to the 12th of February, both days inclusive.—46, Dame-street, Dublin, January 28, 1862.

CLARENDON CONSOLIDATED MINING COMPANY OF JAMAICA (LIMITED).—Notice is hereby given, that the ANNUAL GENERAL MEETING of the Clarendon Consolidated Mining Company of Jamaica (Limited) will be HELD at the offices of the company, 187, Gresham House, Old Broad-street, on MONDAY, the 17th day of February inst., at one o'clock precisely, in conformity with the terms of the company's deed of settlement.

And notice is hereby further given, that the transfer books of the company will be closed from the 3d to the 17th day of February, both days inclusive.

By order of the Board, JOHN H. KOCH, Sec.

187, Gresham-house, Old Broad-street, London, February 1, 1862.

NATIONAL ASSOCIATION FOR THE RELIEF OF BRITISH MINERS.—The Committee of the National Association for the Relief of British Miners URGENTLY APPEAL to the BRITISH PUBLIC on BEHALF of the FAMILIES of the SUFFERERS by the DREADFUL CATASTROPHE at the HARTLEY NEW PIT, near NEWCASTLE-ON-TYNE: 220 lives have been sacrificed by this fearful calamity, and the committee feel that an appeal on behalf of the widows and orphans of the victims of this unprecedented visitation will meet with a ready response from the humane and benevolent in every part of the kingdom.

An officer of the association has proceeded to the scene of the accident, and will render every assistance in his power to the bereaved families of the victims.

The following subscriptions have been received:—

	£	s.	d.		£	s.	d.
Amount already acknowledged.	270	0	0	— Salkeld, Esq.		5	0
The Countess Caroline Bellew (per the Editor of the *Court Circular*)	5	0	0	Lieut.-Gen. Forter		5	0
				J. P.		1	0
Mrs. S. A. Jarvis	5	5	0	Messrs. W. Dawson & Sons, 74, Cannon-street		1	1

Subscriptions received by Sir Samuel Scott, Bart.; Messrs. Robarts and Co.; and the Secretary, HADDOCK DENNYS.

No. 23, Regent-street, Pall-mall.

ST. JAMES'S HALL—FOR THE HARTLEY COLLIERS' WIDOWS AND ORPHANS.—On Friday evening, the 7th Feb., "An Evening with the Miners," with copious illustrations and experiments, by JOHN S. PHENE, Esq., F.R.G.S. "The Dead March in Saul," by GEORGE COOPER, Esq., organist to Her Majesty. To commence at Eight o'clock precisely. For committee, bankers, &c., see the *Times* of this day. Stalls, 5s.; balcony, 3s.; body of the hall, 1s. Tickets at Mr. Mitchell's, Mr. Sams's, and at the Hall. The nett receipts, without any deductions for rent or otherwise, will be forwarded direct to the afflicted.

THE LLANMORLAIS COLLIERY COMPANY (LIMITED). Capital £20,000, in 10,000 shares of £2 each.

Applications for the remaining shares in this company are invited to be made forthwith to the secretary, at the company's offices, 25, Bucklersbury, as it is intended shortly to close the subscription list. Each application must be accompanied by a deposit of 10s. per share. By order, CHARLES WARWICK, Sec.

INDIA FREEHOLD LAND, COLONISATION, TRUST, AND AGENCY ASSOCIATION (LIMITED.)

Notice is hereby given that the directors will PROCEED to ALLOT the SHARES in this association on MONDAY, the 10th day of February next, on or before which day all applications for shares must be made either to the bankers or brokers of the association, from whom prospectuses and forms of application can be obtained.

BANKERS.

London.... Messrs. Barnett, Hoare, Barnett, and Co., 62, Lombard-street.
Liverpool.. The Union Bank.
Glasgow .. The City of Glasgow Bank.

BROKERS.

London ..... Messrs. Towgood and Strachan, 33, Throgmorton-street.
Liverpool ..... Joseph Pryke, Esq., Castle-street.
Manchester .... Messrs. Duncroft.
Leeds ..... Messrs. Wise and Jennings.
Birmingham .... Messrs. Pearson and Son.
Glasgow ..... Messrs. MacEwen and Auld, 63, St. Vincent-street.
" ..... William Bell, Esq., North David-street.
Edinburgh ..... Robert Allan, Esq., 4, St. Andrews-square.
" ..... Thomas Miller, Esq., 72, Princes-street.
Aberdeen ..... John Jamieson, Esq., 56, Marischall-street.

2, New Broad-street, London, Jan. 31, 1862. By order, E. J. RAY, Sec.

CHARLES DAVEY AND CO., SAFETY FUSE MANUFACTURERS, ST. HELEN'S JUNCTION, LANCASHIRE.

CONSOLIDATED COPPER MINES OF COBRE.—At a

HALF-YEARLY GENERAL MEETING of the proprietors of the association, held at the offices of the company, Gresham House, Old Broad-street, this 28th day of January, 1862, GEORGE HIBBERT, Esq. (Chairman) in the chair,

The advertisement convening the meeting having been read, the following report was read:—

REPORT.

In conformity with the practice at this season of the year, the directors now submit to the shareholders a statement of their affairs as far as the same can be made up for the year 1861. In the last report the attention of the shareholders was specially called to the frequent accidents to the machinery, and to the very reduced price of ores. In consequence of the former, the agents have been unable to work the lower levels of the mines, from whence the richer ores have for some past been obtained, and, consequently, to keep up the produce were compelled to have recourse to the upper levels of the great mine, where the ores were known to be of a comparatively inferior quality, on which account the workings in that district were some years ago suspended. It is expected, however, that as they get deeper the ores will be equally rich as those raised in other portions of the company's property at the same depth. In the meantime, instructions have been sent to Cuba to urge the agents, with the aid of the new machinery recently sent out, to endeavour to raise the percentage of these ores before shipping them to this country.

The low prices for the ores continued until the month of October last, from which time better prices have been obtained.

The shareholders cannot fail to see that these combined circumstances have materially affected the financial position of the company, and are matters over which the directors have no control.

The ores raised to November last are about the same in quantity as those raised in the preceding year, but the produce, for the reasons before stated, averages only 15⅝.

The usual sketch of the financial position of the company is now laid before the shareholders, and after duly considering the same, the directors propose to pay a dividend of £1 per share, which is now declared payable on and after Tuesday, the 11th day of February next.

In conclusion, the directors wish to record their full confidence in the continued productiveness of the mines, not only in respect to large quantities of ore ground already in sight, and capable of being immediately worked upon, but also from the large extent of yet unexplored ground, which there is every reason to believe will, on being properly laid open, afford equally remunerative results.

At this meeting two directors, James Denis De Vitré, Esq., and Walter Shairp, Esq., and one auditor, Alexander Druce, Esq., go out of office by rotation, but are immediately eligible, and are candidates for re-election, and for which, at the close of this meeting, a ballot will take place.

It was then moved, seconded, and carried unanimously:—

That the report now read be received and adopted.

That the best thanks of the meeting be given to the Chairman and directors for their services in conducting the affairs of the company.

The ballot was then proceeded with, when James Denis De Vitré, Esq., and Walter Shairp, Esq., were re-elected as directors, and Alexander Druce, Esq., as auditor of the company.

CONSOLIDATED COPPER MINES OF COBRE.—Notice is hereby given, that a DIVIDEND of ONE POUND PER SHARE, free of income tax, will be PAID to the holders of certificates in this company, at the offices of the association, Gresham House, Old Broad-street, on and after TUESDAY, the 11th day of Feb. next, between the hours of Eleven and Three o'clock. The proprietors must leave their certificates for examination three clear days before the day of payment.

WALTER SHAIRP } Directors of the
GEO. WHITMORE } Company.

Gresham House, Old Broad-street, January 28, 1862.

VALUABLE IRONSTONE DEPOSIT IN MERIONETHSHIRE.—An immense and important deposit of ironstone has lately been discovered on the Crown land, about three miles eastward of Dolgelly. The appearance of the ironstone is all that the most fastidious geologist or mineralogist could wish. A comparatively small expenditure only is necessary to make an immediate return, and the fact that Messrs. Townsend, Kirkwood, and Co. of Swansea, are working an iron mine a short distance to the westward, on the same range, should give confidence to the most timid adventurer, because it is notorious that gentlemen with profound practical knowledge never embark their capital in mines unless success is almost certain. The sett contains nearly 250 acres of land. The lode runs for a great distance along the right of a bank, at a considerable elevation above the level of the valley below. Along this valley a railway is projected, which will run from Llangollen station through Bala, Dolgelly, and thence to Barmouth. This will greatly facilitate the transit of materials and minerals. Taking this into account, as well as the other facilities for working, I think that this mine is well worthy of notice, and that a fair dividend would be secured upon all moneys invested. Looking at the situation of this mine, I consider it to be more than an ordinary speculation. With such a piece of unexplored ground, in so highly mineralised a district as this, I have no hesitation in stating it as my opinion, that as soon as three or four men are set to work to raise metal sufficient ore could be obtained to freight a vessel of 100 tons burden monthly, and in a short time this quantity could be doubled. A cart-road passes through the northern part of the sett. The distance from the mine to the shipping port is from five to six miles, and the cartage about 4s. 6d. per ton. The circumstances of the present owners not enabling them to carry on the operations, they have decided to sell the mine at a moderate price.—KENRIC ROBERTS: Jan. 29.

For further particulars, apply to Mr. HUGH JONES, No. 3, Elder-row, Dolgelly.

FOR SALE, BY PRIVATE CONTRACT, EKER'S COPPER WORKS, NEAR DRAMMEN, IN NORWAY.

The above mines being now for sale, the following report of their present condition has been carefully drawn up by Mr. Martin Rask, Cand. Min., of Norway:—

Eker copper works are situated in the parish of Eker, county of Buskerud, in Norway, and were founded in the year 1848, by the present owners, Messrs. A. M. Tandberg, Jacob Borch, and B. Allum, merchants in Drammen, and Mr. Weitz, manager and partner.

The veins of ore belong to the primitive formation around Kongsberg Silver Mines, and are probably of the same class as the Fahlbaands, or strata of the primitive formation, which are more or less impregnated with sulphurates. At these mines, these sulphurates are so highly predominant, that they have almost removed other minerals, and the layers are formed by parallel strata of pyrites,—viz.: copper pyrites and iron pyrites, containing on an average, 1½ per cent. copper, although the copper pyrites is rather unequally mixed in the mass. In consequence of the position, the layers of ore may be supposed to continue to a considerable depth, as the sulphurates of the same formation at Kongsberg Silver Mines have been examined as deep as 1600 ft. under the surface without any decrease. At the copper mines several layers have been examined, one of which has been worked as head mine for the first ten years. Three years ago another layer was uncovered, and being richer than the former, and having a better situation, all the smelting ore was afterwards taken from this; both have their horizontal directions from north to south, falling 45° against west, and are separated by a sterile stratum of rock, from 5 to 25 ft. thick.

The head layer is found to be worth working for 1000 ft. in length, but in all probability continues a greater distance, as its northern end is at present unknown, being uncovered. The size of these layers varies between 1¼ and 15 ft., by an average thickness of 5 ft., all layers and their whole extensions belong to the works. As no river is in the neighbourhood of the mines, the ore and water are worked out of the mine by two horse-whims. The ore afterwards is picked until the fourth of its volume by about 3 per cent. of copper, and carried to the works to be smelted. The other three parts of the out-mined ore which is not used now, as it contains too little copper to be profitably smelted, is placed round the mines, where a considerable space is levelled, and having accumulated during the whole time the mines have been worked, its quantity and quality cannot be accurately fixed, but is, in all probability, 10,000 to 11,000 tons of magnetic and sulphuric iron pyrites, from which an average of at least 30 per cent. of sulphur, and ½ per cent. of copper can be picked without any great expense. The ground at the mines belong to the works, and houses necessary for different purposes are built there in convenient places; four years ago a new road was made by the works, leading from the mines three miles to the smelting place, and two miles from the Drammen river, by its tributary the Hoen river, where sufficient ground and a water-fall is hired for £17 per annum. Close to the smelting place, a farm with sixty Norwegian maals, each containing 10,000 square feet of good cultivated ground, also belong to the works, and there is also a suitable residence for the head manager. The following table shows the working condition during the five years from 1855 to 1860. One Norwegian "lagter" contains 6 ft. 5 in., and one Norwegian "tonde" contains 8 cubic feet of ore, of an average weight of 960 pounds, Norwegian measure:—

Year.	Number of men appointed by works.				Outmined cubic lagters of solid rock.	Produced tonder of copper ore for smelting place.	Gained refined copper.	
	Manager and overseers.	Workmen by the mine.	Workmen by the smelting place.	Total.			Cwts.	Lbs.
1856	4	41 7-12	12	53 7-12	108·93	1056 5-8	499	21
1857	4	41 10-12	12	53 10-12	107·43	925 4-8	356	28
1858	4	51 10-12	12	63 1-12	153·89	1776 1-8	191	45
1859	4	28 5-12	12	40 5-12	99·14	1125 4-8	433	63
1860	4	20 10-12	11 2-12	32	66·39	816	386	80
Total..	4	36 9-12	11 10-12	48 7-12	525·78	5699 7-8	1846	21

At the present time the mines are worked on the same scale as the year 1860. The third part of the workmen are boys, who are picking the ore. The copper is considered very good and useful, as it does not contain any obnoxious metals, and a considerable part is sold to the Government for the Navy at Carl Johansværn, in Christianiafjord. The situation of the works is in one of the richest counties in the land, and close to the sea, the cheap price for the necessary transport, material and wages, makes the works valuable. One ton of ore, for instance, is carried from the mines to the smelting place for 1s. 2d., and from the mines to Drammen river for 1s. 10d.; on this river it may be transported to the seaport of Drammen, free on board the vessel, for 2s. per ton. For the construction of a tramway for horses from the mines to the river the localities are very favourable, if a transport in the summer season would suit the purpose better, by this manner, and by using the present steamers on the river, the expenses would be greatly reduced.

At the smelting works several thousand Norwegian "lasts" of good charcoal, each "last" containing 62½ cubic feet, may be got at 5s. per last from the saw-mills situated close by; the saw-mills also furnish the works with every kind of wooden material at a low rate, and especially the wood for roasting the copper ore at a price of 3s. 6d. for 72 cubic feet. At the mines wood is to be had from the surrounding large forests at an average price of 6s. per 72 cubic feet. The usual price for a day's work for one man varies from 1s. 2d. to 2s.

All these circumstances makes the works very suitable for every technical business in which pyrites is used; for instance, making sulphuric acid, for the fabrication of the sulphate of copper and iron, and for making oxide of iron and other colors.

In May, 1859, the work at the mines was considerably limited, and by stopping the use of the horse-whim for a half-year, the water filled almost the lower part of the mine to a depth of 100 ft. from the surface. In consequence of this, the number of the workmen at the mine, as the table shows, has been much less since that time, and the richest points of the veins, which are under the surface of the water, have not been worked for the last 3½ years. If furnished with suitable steam-engines for pumping and taking out the ore, the whole mine would be free of water in a month, and by better use of all its raw materials, the works which are at present only limited, would no doubt turn out a very profitable speculation.—For further particulars, apply to Mr. WM. MAY, 10, Catherine-court, London, E.C.: or Mr. JACOB BORCH, at Drammen.

Dated, Eker Copper Works, Drammen, September 24, 1861.

In the Court of the Vice-Warden of the Stannaries. Stannaries of Cornwall.

In the Cause of HARVEY AND OTHERS v. SPARGO.
IN RE NORTH PROVIDENCE MINE.

TENDERS, stating the highest price which will be given, for the 36 in. cylinder STEAM ENGINE, with bob and BOILER 10 tons, now at HALAMANNING MINE, in the parish of St. Hilary, and the lighter parts and brass work of the engine, now at the stores of Messrs. Higgs and Son, Penzance, WILL BE RECEIVED at the Registrar's Office, Truro, UNTIL WEDNESDAY, the 15th day of February next.

HODGE, HOCKIN, AND MARRACK,
Plaintiff's Solicitors, Truro.

Dated Registrar's Office, Truro, January 30, 1862.

SHARES IN THE LLYNVI VALE IRON COMPANY.
PERIODICAL SALE (ESTABLISHED IN 1843) OF REVERSIONS, POLICIES, ANNUITIES, SHARES, BONDS, &c., for THURSDAY, FEB. 6.

MR. MARSH has received instructions to include in his NEXT MONTHLY PERIODICAL SALE of REVERSIONS, POLICIES, &c., appointed to TAKE PLACE at the Mart, on THURSDAY NEXT, Feb. 6, at One o'clock punctually, in lots, TWO HUNDRED AND FIFTY SHARES in the LLYNVI VALE IRON COMPANY, each share representing £150 of capital stock of the company, on which £125 per share has been paid-up.

Particulars may be obtained at the Mart; and at Mr. MARSH's offices, 2, Charlotte-row, Mansion House.

SHARES IN THE WEST SILVER BANK MINING COMPANY.
PERIODICAL SALE (ESTABLISHED IN 1843) OF REVERSIONS, POLICIES, ANNUITIES, SHARES, BONDS, &c., for THURSDAY, FEB. 6.

MR. MARSH has received instructions to include in his NEXT MONTHLY PERIODICAL SALE of REVERSIONS, POLICIES, &c., appointed to TAKE PLACE at the Mart, on THURSDAY NEXT, Feb. 6, at One o'clock punctually, in lots, SEVENTY £3 SHARES (fully paid-up) in the WEST SILVER BANK MINING COMPANY (LIMITED). Also, TWENTY £2 SHARES (fully paid-up) in the DEVON NEW COPPER MINING COMPANY, Ashburton, Devon.

Particulars may be obtained at the Mart; and at Mr. MARSH's offices, 2, Charlotte-row, Mansion House.

GLAMORGANSHIRE.

MR. LEWIS H. ELIAS WILL SELL, BY AUCTION, on Wednesday, February 12, 1862 (subject to such conditions of sale as shall then be produced), unless previously disposed of by private contract, of which due notice will be given, at the Castle Hotel, Neath, all that VALUABLE COLLIERY, called or known by the name of the LOWER RESOLVEN, in the hamlet of Resolven, parish of Lantwit-juxta-Neath, Glamorgan, together with the MACHINERY, PLANT, IMPLEMENTS, and EFFECTS now standing and being thereon, consisting of a good PUMPING ENGINE, a good WINDING ENGINE, pumps, pipes, water and coal trams, 2360 yards of iron rails, signal wire, winding chain, weighing machine, smiths' shop and tools, complete, &c.

And also the FARM and LANDS called PENCAER-FELIN, upon which the colliery stands.

The surface area of the property is 606 acres, and underneath lie the following veins of coal:—The Three-feet vein, known as the "Resolven Steam Coal" (this vein can be worked at a moderate expense, in consequence of having a rock top, and requiring little or no timber), and nine other valuable veins, amounting in the aggregate to about 50 feet of coal.

This colliery is admirably situated for the conveyance of its produce, being only fifty yards from the Vale of Neath Railway, and is connected therewith by a siding made for the purpose, and is also about seven miles distant from the important shipping port of Neath, at which there is now floating accommodation at the docks called the Briton Ferry Docks, and about thirteen miles from the important shipping port of Swansea, at which there is great floating accommodation; this distance will be shortened by three miles upon the completion of the Swansea and Neath Railway. From the great facilities with which this colliery abounds, it cannot fail, in the course of a short period, to rank with one of the best collieries in South Wales.

The colliery is held under a lease, dated the 29th April, 1857, for the term of 99 years, from the 29th September, 1856, at the dead rent of £500 per annum, and at the royalty of 7d. per ton upon all coal and culm. The farm is also held upon lease, of the same date and term, at the annual rent of £50.

A report on the colliery, made by Mr. Henderson, of Aberdare, Glamorganshire, in the month of February, 1859, as also a plan of the surface, and a section of the veins, can be seen at the office of Mr. Kempthorne, solicitor, Neath, where further particulars can be obtained.

The property is also known to John Hedley, Esq., one of Her Majesty's Inspectors of Coal Mines, Derby, he having some time ago inspected and reported thereon, and, if necessary, a reference may be made direct to him.

The sale to commence at Three o'clock.

A view of the colliery can be had upon obtaining a card for that purpose from the auctioneer.

LONGCLOSE AND COPPER TANKARD.
A VALUABLE MINE SETT AND MATERIALS FOR SALE.

MR. H. V. NEWTON WILL SELL, BY PUBLIC AUCTION, on Monday, the 24th day of February, 1862, at Twelve o'clock at noon precisely, at the account-house, on the mine (unless accepted by the lord in the meantime), the whole of that very VALUABLE MINE SETT, now called or known by the name of LONGCLOSE, comprising COPPER TANKARD, and being the western part of South Crofty Mine, situate near Tuckingmill, in the parish of Illogan, in the county of Cornwall, together with the whole of the excellent MATERIALS thereon, viz.:—

A 36 in. cylinder STEAM PUMPING ENGINE, with TWO BOILERS about 20 tons.

A 22 in. cylinder STEAM WHIM, with ONE BOILER about 9 tons.

185 fms. of pitwork, complete, chiefly 8 in.; about 185 fms. of 8 in. rods, shears, capstan, capstan rope, chain, pulleys and stands, and every requisite for the further development of the mine, now in good working order.

A plan and section of the above may be seen at the account-house.

For inspection of the mine, and further particulars, apply to Capt. W. RUTTER, at the mine, any day prior to the above date; or to H. V. NEWTON, auctioneer, Camborne.

Dated South Crofty, January 28, 1862.

In Chancery.

IMPORTANT FREEHOLD AND LEASEHOLD COLLIERIES, SOUTH WALES.

MESSRS. FULLER AND HORSEY are instructed to SELL, BY AUCTION, on Wednesday, March the 12th, 1862, at Twelve o'clock, at the Auction Mart, London, in One Lot, by order of his Honour the Master of the Rolls, and with the concurrence of the mortgagees, the very VALUABLE COLLIERIES and OTHER MINERAL PROPERTIES and SURFACE LANDS, freehold, copyhold, and leasehold, belonging to the RISCA COAL AND IRON COMPANY,

Situate about 6¾ miles from Newport (a safe and commodious port on the Usk, near its junction with the Severn), in the county of Monmouth. There is direct railway communication between the works and the docks and wharfs at Newport, the Western Valleys line of railway running through the property. Vessels of upwards of 1000 tons burden can enter the docks at Newport, or load along the side of the wharf.

The coal fields comprise a tract containing 1044 acres, held under Lord Tredegar, for an unexpired term of 47 years, at a fixed rent of £757 per annum, and 6d. per ton for fire-clay. A tract containing 19 A. 1 R. 31 P., held by the same tenure, at a royalty of 9d. per ton for coal, and 6d. per ton for ironstone. A tract containing 331 A. 0 R. 6 P., held under Lord Tredegar, for 42 years, from 1858, at a royalty of 10½d. per ton for coal, the minimum rent to be £500 per annum. A tract of 112 A. 1 R. 3 P., freehold; and a tract of 128 A. 1 R. 7 P., copyhold, subject to a trifling quit rent and fine.

The surface lands comprise the RISCA FARM, 138 A. 0 R. 11 P., with manager's house and cottages. BUCK FARM, 73 A. 1 R. 28 P., with lime kilns and cottage, agents' houses, offices, workmen's cottages, &c., held under beneficial leases.

There are four seams or veins of coal, extending over the principal portion of the entire area, of the thickness of 28 ft. in the aggregate, and known as the Rock Vein, the Big Vein, the Black Vein, and the Sun Vein. The Black Vein is the most valuable; it is a first-class steam coal, and has the reputation on the market of being the best coal for exporting to the several foreign coaling stations in warm climates, as it is not injuriously affected by the high temperature. The Royal West India Mail Packet Company have shipped it to their foreign coal depôts for upwards of 20 years. The thickness of the seam is 8 ft. 10 in., and the quantity at this time actually raised is at the rate of 80,000 tons per annum. The Rock Vein is a seam of coal of an average thickness of 4 ft. 6 in., and is also used by the Royal West India Mail Company; the quantity now actually raised is at the rate of about 80,000 tons per annum. The Big Vein has never been worked at Risca, but it is ascertained to be well adapted for making coke, or for general manufacturing purposes; the thickness of the seam is 12 ft. The Sun Vein, which also is not now worked, is from 2 ft. 6 in. to 3 ft. in thickness, and has a good roof; it is adapted for a house coal. The general arrangements of the workings are good, many improvements, both in the modes of working and ventilation, having been recently adopted, the result being a material increase in the quantity of coal raised, and a proportionate diminution of the cost of raising. Other improvements, suggested by the Government Inspector and the arbitrator, are in progress.

The PLANT is all in efficient working order, both for winding and pumping, and there are sufficient railway trucks and underground trams for the quantity now being worked.

A contract is now running with the Royal Mail Steam Packet Company for the supply of 100,000 tons of coal per annum, on satisfactory terms, subject to which this sale is made.

Attached to the collieries are FIRE-BRICK WORKS, with the requisite MACHINERY, also STONE QUARRIES and LIME KILNS.

Ironworks could be advantageously introduced, as there is a rich vein of ironstone underlying the seams of coal, and there is limestone in abundance.

There are also SEVENTY-NINE COTTAGES for workmen, residences for clerks and overmen. Suitable offices, and a shop and warehouse, wherein a trade is conducted profitable to the proprietors and of great convenience to the workmen.

The manager's residence and some of the farms are in hand, from which a supply of hay and corn for the horses is obtained. Other farms are let. The total amount of rentals received by the company is £590 6s. per annum.

With the sale of the colliery will be included the company's interest in the large and commodious wharf at Newport, on which are laid three lines of tram rails communicating with the Western Valleys Railway, and running down to three loading stages on the river. The yard forms a depôt for coals, and there are good offices, some labourers' cottages, and manager's house. Also nine coal sheds in the docks at Southampton, held at a rental of £140 per annum.

Surveys and highly favourable reports have been made by eminent mining engineers.

The works may be inspected, and plans and particulars and other information shortly obtained of Messrs. FUTVOYE, SAWTEL, and LIGHTFOOT, solicitors, 23, John-street, Bedford-row; Messrs. CROWDER and MAYNARD, solicitors, Coleman-street; Messrs. CUTLER and TURNER, solicitors, 29, Bedford-square; Messrs. SIMPSON and NORTH, solicitors, Liverpool; Messrs. COLEMAN, TURQUAND, YOUNGS, and Co., Tokenhouse-yard; at the Westgate Hotel, Newport; at the Cardiff Arms, Cardiff; at the principal inns at Bristol and Gloucester; at the Auction Mart; and of Messrs. FULLER and HORSEY, Billiter-street, London, E.C.

GEO. WHITING, Chief Clerk.

MINERAL PROPERTY TO LET.—TO BE LET ON LEASE, about THREE HUNDRED AND SIXTY ACRES of COAL GROUND, believed to contain the celebrated Rhondda seams of coal, together with the Aberdare steam coal measures. A large bratticed pit has been sunk on the property, to the depth of about 70 yards. The property adjoins the Taff Vale Railway, and is within half a mile of the post town of Pontypridd, Glamorganshire, and 12½ miles from the port of Cardiff.—For terms and further particulars, apply to Messrs. BURBY and CARLISLE, solicitors, New-square, Lincoln's Inn, London, W.C.; or to ALEXANDER BASSETT, Esq., mining engineer, Cardiff, Glamorganshire.

TO SINKERS AND CONTRACTORS.—WANTED, TENDERS for SINKING an ENGINE-SHAFT about NINETY YARDS DEEP, near Sheepbridge Ironworks, for the CHESTERFIELD AND MIDLAND SILKSTONE COLLIERY COMPANY (LIMITED).

Specifications and sections of the strata, as ascertained by boring, may be seen at the offices of Messrs. BROWN and JEFFCOCK, civil and mining engineers, Barnsley, and 18, Bank-street, Sheffield, on and after Monday, 3d February next.

Tenders to be forwarded to the Secretary of the Chesterfield and Midland Silkstone Colliery Company (Limited), 42, Bridge-street, Blackfriars, London, not later than the 20th February next.—42, Bridge-street, Blackfriars, London, Jan. 30, 1862.

UNRESERVED SALE of HARFORD'S and the BRISTOL BRASS BATTERY and WIRE COMPANY'S WORKS, at KEYNSHAM and SALTFORD, in the COUNTY of SOMERSET.

TO BE SOLD, BY AUCTION, without reserve, in One Lot, at the Commercial Rooms, Bristol, on Tuesday, the 11th day of February, 1862, at One o'clock P.M. (subject to conditions to be then produced), all the above-mentioned VALUABLE PROPERTY, comprising THREE WATER MILLS, with their machinery and contents, manager's house, workmen's cottages, gardens, and land, containing altogether about 13 acres.

The present occupier's tenancy expires on the 25th day of March next, at which time possession will be given to a purchaser.

Detailed printed particulars may be procured on application to Messrs. OSBORNE, WARD, and Co., solicitors, Bristol, at whose offices inventories of the machinery and tools may be seen. Orders to view the premises may be obtained of Mr. EDWIN NAISH, Bristol.

Bristol, January 14, 1862.

MINING MATERIALS FOR SALE IN THE COLOMENDY LEAD MINE, MOLD, FLINTSHIRE.

TO BE SOLD, BY PUBLIC AUCTION, at the Black Lion Hotel, Mold, on Friday, the 14th of February next, at Two o'clock in the afternoon, all the MATERIALS in the above mine, consisting of ONE 18 in. cylinder CONDENSING STEAM ENGINE, with boiler and connections complete; pumping and winding gear; 1 7 in. plunger-lift, 40 fms. long, complete; 1 6 in. drawing lift, 15 fms. long, complete; with rods, bobs, set-offs, staples and glands, capstan and rope, sheave and pulleys, horse whim, with chain and kibbles, ladders, air-pipes, wheelbarrows, and sundry other articles.

DEVON AND COURTENAY MINE, TAVISTOCK.—These SETTS and MATERIALS TO BE SOLD, BY PRIVATE CONTRACT. The machinery includes WATER-WHEEL, 30 ft. by 9 ft. (with ample supply of water from the River Tavy), STEAM DRAWING ENGINE and BOILER, with crusher, 120 fms. pumps, 300 fms. rods, &c.—For particulars, &c., apply to the purser, Mr. H. E. CROKER, 8, Frankfort-street, Plymouth.

FOR SALE, a new WATER-WHEEL, never erected, 16 feet in diameter, 12 ft. abreast, with iron shaft, bosses and rings, and wrought-iron arms; also with gear for getting up speed the whole diameter of the wheel. There is first-rate workmanship about this wheel, and will be sold a bargain; weight about 10 tons. Also, a WATER-WHEEL 30 ft. diameter, and 5 ft. abreast. Also, an 18 horse power CONDENSING ENGINE, with CORNISH BOILER, 26 ft. long, 6 ft. diameter, with 10 fms. of 10 in. pumps, and bob for the same. The new water-wheel is to be seen at Barnstaple, and the engine, &c., close by.—Apply to HENRY WEBBER, engineer, Barnstaple.

MALLEABLE IRONWORKS AND FORGES, NEAR GLASGOW, FOR SALE, BY PRIVATE BARGAIN, the property of the Monkland Iron and Steel Company.

1.—The GARTNESS MALLEABLE IRONWORKS, in the vicinity of the town of Airdrie, county of Lanark, and about twelve miles distant from Glasgow.

The works contain EIGHTEEN PUDDLING FURNACES and FOUR HEATING FURNACES, with suitable MACHINERY, FITTINGS, and APPLIANCES, and there are in connection with them wright and smiths' shops, fitting shop, with small engine for driving turning lathe, and hammer for breaking fettling; pig-iron sheds, iron racks, offices and storehouses, manager's house, consisting of 11 apartments; house of two storeys, occupied as a store, with cellarage, office, storekeeper's dwelling-house, 49 workmen's houses, stables to accommodate 18 horses, harness room, cart and straw sheds, granary, and boiler house.

These works are capable of turning out 160 to 180 tons of malleable iron weekly.

There are also about 20 acres of land, in a high state of cultivation.

2.—The GARTNESS and MOFFAT FORGES are situated in the immediate vicinity of the rolling mills before described; they are three in number, and are worked partly by steam, partly by water-power. In connection with them are smiths' shop, weighing machine and weighing house, office and storehouses, and nine workmen's houses.

The forges are in good working condition, and are capable of making shafts of 10 to 12 tons weight and under.

The locality in which these works are situated is very favourable for obtaining supplies of iron and coal on the best terms, and for communication with the market.

The subjects will be disposed of at a very moderate price.

For further particulars, apply to Messrs. MCLELLAND, SON, and SMITH, accountants, 103, St. Vincent-street; Messrs. MORRISONS and ANDERSON, writers, 40, St. Vincent-place: or to Messrs. BANNATYNES and KIRKWOOD, writers, 150, West George-street.

Glasgow, January 18, 1862.

VALUABLE COAL FIELD TO LET, in one of the best situations in GLAMORGANSHIRE.—Apply to "A. B.," Post-office, Bridgend.

COAL BEDS.—TO BE LET ON LEASE, for 21 years, from the 25th of March, 1862, the VERY EXTENSIVE and VALUABLE COLLIERIES called the SHEFFIELD COLLIERIES, within the parish of Sheffield, in the county of York, for many years carried on and known by the names of the SOAP HOUSE COLLIERY, the CASTLE COLLIERY, and the MANOR COLLIERY. Also, the COAL WORKINGS, wrought by outstroke, UNDER LANDS at BIRLEY VALE, in the parish of Handsworth, about three miles from the town of Sheffield.

The Silkstone and the Park Gate beds of coal have been worked at these collieries by the Sheffield Coal Company, whose lease will expire on the 25th day of March, 1862.

There is yet unworked in the parish of Sheffield—
Of the Silkstone bed, upwards of ..... 800 acres, 6 ft. 0 in. thick.
Of the Park Gate bed, upwards of ..... 400 acres, 5 ft. 3 in. thick.
And in the parish of Handsworth—
Of the Silkstone bed, upwards of ..... 300 acres, 6 ft. 0 in. thick.
Of the Park Gate bed, upwards of ..... 200 acres, 5 ft. 0 in. thick.

The beds in the parish of Sheffield are under the lands of the Duke of Norfolk, and those in the parish of Handsworth are under lands not the property of His Grace. In each case the coal field is quite entire.

The coal from the collieries in the parish of Sheffield is conveyed to the depôt contiguous to the town by means of tram and railways made through the Duke of Norfolk's estate.

The Birley Vale branch of the Manchester, Sheffield, and Lincolnshire Railway was constructed by that company a few years ago into the coal field in the parish of Handsworth, now proposed to be let.

The Silkstone coal in London and in the provincial towns is classed amongst the best house fire coal, and the Park Gate coal is used very extensively for trade purposes, and likewise for domestic use Coke from these coals is made in great quantities.

The increasing trade of the town and neighbourhood of Sheffield, and the nearness of the collieries to that town, the facilities afforded by the Manchester, Sheffield, and Lincolnshire, the Great Northern, and the Midland Railways, and the fact of the coal field being entire, and wholly the property of the Duke of Norfolk, give to these collieries advantages which few possess.

For further particulars, apply to Mr. MARCUS SMITH, at the Norfolk estate office, Sheffield; or to Messrs. FEW and Co., solicitors, Covent-garden, London.

January, 1862.

TO MINING COMPANIES.

HAM IRON AND MANGANESE MINES.—TO BE LET, for a term of years, ONE HUNDRED AND TWENTY-SEVEN ACRES of LAND, containing VALUABLE IRON ORE, RED and BROWN HEMATITE, and MANGANESE. The estate is situate at Ham, which is distant about 1½ mile from Shepton Mallet, and 3½ miles from the city of Wells.

The East Somerset Railway will be open to Wells early in February, establishing through communication without break of gauge between the Great Western Railway eastward at Witham, and the Bristol and Exeter Railway, westward at Highbridge.

The lessee will have to bear the expenses attendant on an application to the Court of Chancery, to sanction a lease of the mines under the Settled Estates Act.

For all further particulars, apply to Messrs. PHIPPS and MACKAY, solicitors, Shepton Mallet, Somerset.—Dated Shepton Mallet, January 16, 1862.

OPPORTUNE INVESTMENT.

TO BE LET, an EXTENSIVE and VALUABLE SETT of POTTERS' CLAY, well situated, and of proven value. The produce is now in the market, and is reported upon by practical potters (who can be referred to) as being especially adapted to the expected large demand from the Continent and for the Staffordshire Potteries.—Apply to Messrs. BUCKLAND and RENDELL, land agents, Newton Abbot, Devonshire.

NICKEL AND COBALT REFINING, AND GERMAN SILVER WORKS, 16, OOZELL STREET NORTH, BIRMINGHAM.

STEPHEN BARKER begs to inform the Trade that he has the following articles for sale:—

REFINED METALLIC NICKEL.	OXIDE OF COBALT. [WIRE, R
REFINED METALLIC BISMUTH.	GERMAN SILVER—IN INGOTS, SHEET

NICKEL AND COBALT ORES PURCHASED.

GOLDENHILL, COBALT, NICKEL, COLOUR, BORAX, AND CHEMICAL WORKS,
NEAR STOKE-UPON-TRENT, STAFFORDSHIRE.
JOHN HENSHALL WILLIAMSON, MANUFACTURER AND REFINER.
Reference.—Professor Miller, King's College, London.

HALL AND WELLS, PATENTEES AND MANUFACTURERS OF SUBMARINE TELEGRAPH CORES, CABLES, &c.—TELEGRAPH CONDUCTORS INSULATED with INDIA RUBBER at £5 per mile and upwards, PARTICULARLY ADAPTED for MINING PURPOSES. Further particulars as to price of cores, cables, &c., can be had on application at 60, Aldermanbury, City, E.C.; and Steam Mills, Mansfield-street, Borough-road, Southwark, S.E.

Copper wire covered with silk, cotton, or any other material, to order.

SARL AND SONS, 17 and 18, CORNHILL, respectfully SOLICIT a VISIT to their magnificent ESTABLISHMENT. The ground floor is more particularly devoted to the display of FINE GOLD JEWELLERY, GOLD and SILVER WATCHES, and FINE GOLD CHAINS.

The SILVER PLATE DEPARTMENT is in the gallery of the building, and consists of every article requisite for the table and sideboard.

In the magnificent show-rooms is displayed a large and beautiful stock of ARGENTINE PLATE, the manufacture of which has stood the test of 20 years' experience.

SARL and SONS have also fitted up a separate show-room for the display of DRAWING and DINING ROOM CLOCKS of the most exquisite designs. Books containing drawings and prices may be had upon application.

SARL AND SONS, 17 and 18, CORNHILL, LONDON

VENTILATION OF MINES.

ELLIS LEVER,
WEST GORTON WORKS, MANCHESTER,
SOLE MANUFACTURER OF THE
IMPROVED SAFETY BRATTICE,
FOR
AIR-COURSES, FLY-DOORS, AND STOPPINGS,
IN THE
WORKINGS OF FIERY COLLIERIES.

ELLIS LEVER DESIRES to INFORM the OWNERS and MANAGERS of COLLIERIES in all parts of the kingdom that THEY CAN BE SUPPLIED at a DAY'S NOTICE with a STOCK of AIR-PROOF BRATTICE or DOOR CLOTH of ANY WIDTH, and in VARIOUS QUALITIES, from SIXPENCE PER SQUARE YARD.

Several miles of the FLEXIBLE TUBING, INVENTED and MANUFACTURED by ELLIS LEVER, is now USED for the PURPOSE of VENTILATION in SINKING SHAFTS and EXPLORING DRIFTS. This TUBING is AIR-PROOF and WATER-PROOF, can be made any size, from 6 inches diameter to 3 feet diameter, in unlimited lengths. Every tube is fitted internally with hoops, 12 inches apart, which prevent their collapsing.—Prices and further information will be sent on application to
ELLIS LEVER, MANCHESTER.

Adopted by the Governments of Great Britain, Spain, Denmark, Russia, Brazil, East and West Indies.

EASTON'S PATENT BOILER FLUID,
FOR REMOVING AND PREVENTING
INCRUSTATION IN STEAM BOILERS, LAND AND MARINE.
P. S. EASTON AND G. SPRINGFIELD,
Patentees and Sole Manufacturers,
37, 38, and 39, WAPPING WALL, LONDON, E.,
Or of their Agents in the principal towns of Great Britain and the Colonies.

CREASE'S PATENT EXCAVATING MACHINERY, for SUPERSEDING the SLOW and EXPENSIVE USE of MANUAL LABOUR in SINKING SHAFTS, DRIVING LEVELS, TUNNELLING, &c., is guaranteed to drive through any rock of average hardness at a minimum rate of 1 fm. per diem, and to sink shafts at the rate of 2 fms. in three days.

Mr. CREASE will undertake contracts for sinking shafts, driving levels, &c., at an enormous reduction of time and great saving in cost.

Applications to be addressed to Mr. GEORGE T. CURTIS (sole agent), 17, Gracechurch-street, London, E.C.

By providing the power of calculating the time and cost to explore a certain depth and extent of ground, speculation in mining will be assimilated to commercial pursuits, with this unmistakable advantage—that when the ground has been once carefully and judiciously selected, and operations properly and systematically carried out for its development, there would be far less chance of unsatisfactory results than are met with by merchants and manufacturers in the usual routine of their business. As this important invention must beneficially interest the landowners, mine proprietors, merchants, and miners, we opine it will meet with immediate adoption.—*Mining Journal.*

PATENT BITUMINIZED GAS, WATER, AND DRAINAGE PIPES.—These PIPES POSSESS all the PROPERTIES NECESSARY for the CONVEYANCE of GAS and WATER, and also for DRAINAGE PURPOSES—viz., GREAT STRENGTH, GREAT DURABILITY, and PERFECT INOXIDABILITY, and being non-conductors are not affected by frost, like metal pipes. They are proved to resist a pressure of 220 lbs. on the square inch (equal to 500 ft. head of water), are only one-fourth the weight, and considerably cheaper than iron pipes. They are made 7 ft. lengths, and the joinings are simple and inexpensive. These pipes have been in use in France, Spain, and Italy nearly three years, where the demand for them is very great. The opinions of the press on a public test at the Houses of Parliament, before a large number of engineers and other scientific gentlemen, may be had, with further particulars, at the office of the company, on application to Mr. ALEX. YOUNG, 14A, Cannon-street, London, E.C., where sample pipes may be obtained for trial.

DAVEY'S PATENT BLASTING POWDER,
MANUFACTURED BY DAVEY BROTHERS AND CO.,
NANCEKUKE POWDER WORKS, TUCKINGMILL, CORNWALL.

This blasting powder possesses the following advantages over every other in use:—
1. COMBUSTION is SLOWER and MORE PERFECT when confined in the hole,
2. is MORE IMPERVIOUS to MOISTURE, PRODUCES LESS SMOKE, is LESS DANGEROUS, it BURSTS as MUCH ROCK with a CHARGE OCCUPYING the SAME or even LESS SPACE, and its WEIGHT being TWENTY to TWENTY-FIVE PER CENT. LESS than ordinary gunpowder, a SAVING of ONE-FOURTH the COST EFFECTED.

DAVEY BROTHERS and Co. beg to state that this powder is specially made for blasting, and from its slow combustion is not adapted for projectiles. They would, therefore, caution consumers not to be induced by interested parties to put it to a fallacious trial, by firing a ball from a mortar, which is no test of its explosive force when confined.

AYTOUN'S PATENT SAFETY CAGE AND HOIST.
CHANGE OF LICENSE FEE.

The present LOW RATE of LICENSE FEE, £1 per cage, will be CONTINUED to the CLOSE of the INTERNATIONAL EXHIBITION, where facilities will be afforded to parties interested to assure themselves of the value of the invention. A FULL SIZED SAFETY CAGE will be there EXHIBITED in ACTION, and may be inspected to whatever tests parties may desire. Also, a VARIETY of MODELS, SHOWING the ADAPTATION of the SAFETY PRINCIPLE to CAGES of VARIOUS CONSTRUCTIONS, and to GUIDE RODS of IRON as well as of WOOD.

Parties having thus had an opportunity of assuring themselves of the trustworthiness of the safety cage, and of providing themselves with all the licenses they may require at a low figure, the patentee proposes, immediately on the close of the Exhibition, to raise the license fee to £6, £7, and £8 per cage, according to the weight it is calculated to safely carry. This will enable him to set on foot an active canvass for the introduction of the safety cage into every mining district of the kingdom, a measure plainly impossible at the present low fee of £1.

The patentee has also the satisfaction of saying that he has now made arrangements with the well-known firm, Messrs. James Tod and Son, engineers, Edinburgh, which will enable him to furnish safety cages, calculated to carry from 12 to 15 cwts. of coal or stone, at £10 each, and other sizes in proportion. As the carriage of a cage by rail to the central parts of England does not exceed 10s., the cage may be delivered in almost any locality for a sum not exceeding 10 guineas, exclusive of the license fee, which at present is only 1*l.* Coal and ironmasters, therefore, would do well, at this time, to provide themselves with one, which, on being tried in their pits and found to answer, would serve as a model for making others. By sending the order through the patentee, they will have the advantage of his personal superintendence.

To those who prefer getting them made on their own premises, working drawings or models will be sent, which will enable any ordinary workman to construct the safety cage easily.

In view of any further attempt of the Legislature to make the use of safety cages effective, it would seem advisable to secure licenses at the present low rate for as many mines as required.

Apply to the patentee, ROBERT AYTOUN, 3, Fettes-row, Edinburgh.

ALBERT AND MEDICAL LIFE ASSURANCE,
7, WATERLOO PLACE, PALL MALL, LONDON, S. W.
ESTABLISHED 1838.

The business of the Medical, Invalid, and General Life Assurance Society having been amalgamated with the Albert Life Assurance Company, the united business will hencefore be carried on under the above title.

Accumulated fund exceeds	£500,000
Subscribed capital	447,180
Paid-up capital	137,000
Annual income from life premiums, upwards of	220,000

The new business is now progressing at the rate of more than £25,000 per annum. From Prof. De Morgan's report upon the last valuation of liabilities (end of 1858), and the statements of accounts, it appeared at that time that the surplus in favour of the first business alone, after providing for every liability, was £192,925 2s. 11d.

HENRY WILLIAM SMITH, Actuary.
C. DOUGLAS SINGER, Sec.

INVESTMENTS IN BRITISH MINES.—MR. MURCHISON publishes a QUARTERLY REVIEW OF BRITISH MINING, by which at the same time the POSITION and PROSPECTS of the MINES at the end of the Quarter, the DIVIDENDS PAID, &c.; price One Shilling. RELIABLE INFORMATION and ADVICE will at any time be given by Mr. MURCHISON, either personally or by letter, at his Offices, No. 117, BISHOPSGATE-STREET WITHIN, LONDON, where copies of the above publication can be obtained.

OPINIONS OF THE PRESS ON MR. MURCHISON'S WORK ON BRITISH MINING, PUBLISHED IN 1856.

Mr. Murchison's new work on British Mines is attracting a great deal of attention, and is considered a very useful publication, and calculated to considerably improve the position of home mine investments.—*Mining Journal.*

The book will be found extremely valuable.—*Observer.*

A valuable guide to investors.—*Herapath.*

Mr. Murchison takes sound views upon the important subject of his book, and has done, for a small sum, within the reach of all persons contemplating making investments in mining shares that information which should prevent rash speculation and unproductive outlay of capital in mines.—*Morning Herald.*

A valuable little book.—*Globe.*

Special interest to persons having capital employed, or who may be desirous of investing in mines.—*Morning Chronicle.*

A guide for the investment of capital in mining operations is inestimable. One of the most valuable mining publications which has come under our notice, and contains information than any other on the subject of which it treats.—*Derby Telegraph.*

Parties requiring information on mining investments will find no better and safer informer than Mr. Murchison.—*Leeds Times.*

Those who wish to invest capital in British Mines, this work is of the first importance.—*Welshman.*

It is really a practical work for the capitalist.—*Stockport Advertiser.*

The work enables the capitalist to invest on sound principles; in truth, it is an exact guide.—*Plymouth Journal.*

Those who have invested, or intend to invest, in mines, would do well to consult this useful work.—*Ipswich Express.*

Those desirous to invest their capital in mining speculations will find this work a useful guide.—*Warwick Advertiser.*

We believe a more useful publication, or one more to be depended on, cannot be found.—*North Herald.*

Those interested in mining affairs, or who are desirous of becoming speculators should read and carefully peruse the work.—*Monmouth Beacon.*

Such a work in print, it would be gross neglect in an investor not to consult it before laying out his capital.—*Poole Herald.*

Any person connected, or who thinks of connecting himself, with mining speculation should possess himself of this book.—*North Wales Chronicle.*

WOTHERSPOON'S SCOTCH WHISKEY can now be supplied genuine as in Scotland, at WOTHERSPOON, MACKAY, AND CO.'S, 66, [illegible] STREET, E.C., in single bottles, or in quantity, price 3s. 6d. per bottle; 42s. [illegible]

RAILWAY WAGONS.—WILLIAM A. ADAMS AND CO.,
MIDLAND WORKS, BIRMINGHAM.
BROAD AND NARROW GAUGE COAL AND IRONSTONE WAGONS.
IN STOCK—FOR SALE OR HIRE.

RAILWAY WAGONS.—WILLIAM HARRISON AND CAMM HAVE ON HAND RAILWAY, COAL, COKE, AND MINERAL WAGONS, ON SALE OR HIRE,
AT THE ROTHERHAM WAGON WORKS, MASBRO'.

THE BIRMINGHAM WAGON COMPANY (LIMITED) HAS RAILWAY WAGONS FOR HIRE.
Apply to the SECRETARY, 3, Newhall-street, Birmingham.

THE RAILWAY CARRIAGE COMPANY,
OLDBURY, NEAR BIRMINGHAM.
MANUFACTURERS OF EVERY DESCRIPTION OF RAILWAY PLANT AND IRONWORK.
NEW AND SECOND-HAND RAILWAY WAGONS ALWAYS IN STOCK
FOR SALE OR HIRE.
LONDON OFFICES,—No. 1, MOORGATE.

NOTICE TO RAILWAY COMPANIES.—A RAILWAY SIGNAL of a NOVEL DESCRIPTION (patented) is NOW IN OPERATION on the MANCHESTER AND ALTRINCHAM RAILWAY, which GIVES NOTICE of the APPROACH of a TRAIN HALF A MILE OFF, and, if required, can announce it at any other given distance. It is novel and simple in its construction, not a single complicated movement in it, and when laid down will not require repairs for years. A model may be seen at the *Mining Journal* office, 26, Fleet-street, London, in the course of a week, and a gentleman will shortly call on the different railway companies centering in the metropolis to give any required explanations.

TRADE MARK .....

JAMES RUSSELL AND SONS, CROWN TUBE WORKS,
WEDNESBURY, STAFFORDSHIRE.
WAREHOUSE,—81, UPPER GROUND STREET, BLACKFRIARS, LONDON, S.
The ORIGINAL INVENTORS of WROUGHT IRON TUBES for GAS, WATER, &c. LAP-WELDED BOILER TUBES, HOMOGENEOUS TUBES for BOILERS, &c. GALVANISED and ENAMELLED TUBES, SCREWING TACKLE, STEAM and WATER GUAGES, and EVERY VARIETY of FITTINGS.

JOB TAYLOR AND CO., SWAN FOUNDRY
OLDBURY, NEAR BIRMINGHAM,
SOLE PROPRIETORS of HINTON'S PATENT CUPOLA, which CONSUMES FIFTY PER CENT. LESS COKE than any cupola yet invented. MAKERS of ALL KINDS of MACHINERY connected with the GRINDING and TEMPERING of EVERY SORT of CLAY or MARL, and for the MANUFACTURE of BRICKS, TILES, DRAIN PIPES, &c. Also, of HIGH and LOW PRESSURE STEAM ENGINES of any dimensions, and of GENERAL MACHINERY.

SHORTRIDGE, HOWELL, AND CO., HARTFORD STEEL WORKS, SHEFFIELD, SOLE MANUFACTURERS of HOWELL'S PATENT HOMOGENEOUS METAL PLATES for BOILERS, LOCOMOTIVE FIRE BOXES, and TUBES, COMBINING the STRENGTH of STEEL with the MALLEABILITY of COPPER. RUSSELL AND HOWELL'S PATENT CAST STEEL TUBES. MCCONNELL'S PATENT HOLLOW RAILWAY AXLES.—For prices and terms, apply to SHORTRIDGE, HOWELL, and Co., Hartford Steel Works, Sheffield; or Messrs. HARVEY and Co., 12, Haymarket, London.

CORNISH BORER STEEL.—Upwards of ONE HUNDRED AND SIXTY MINES are SUPPLIED with this STEEL, and the DEMAND for it is RAPIDLY INCREASING.—For terms, apply to R. MUSHET and Co., Fores Steel Works, near Coleford, Gloucestershire.

CYANOGEN STEEL, CAST STEEL, SHEAR STEEL, and IMPROVED FOREST L BLISTER STEEL supplied to order by ROBERT MUSHET and Co., Forest Steel Works, near Coleford, Gloucestershire.
Address to the Works, Coleford.

BELL BROTHERS beg to intimate that, having become SOLE LICENSEES in the United Kingdom of PROF. DEVILLE'S METHOD of PRODUCING PURE ALUMINIUM, they are now in a POSITION to SUPPLY, from their works here, both this metal and its compound with copper, known under the name of ALUMINIUM BRONZE.—Newcastle-on-Tyne, September, 1860.

TO COAL OWNERS AND COKE BURNERS.

MACKWORTH'S PATENT COAL WASHER, OR PURIFIER.—This MACHINE will EXTRACT the SHALE and ALL HEAVY IMPURITIES from SMALL COAL at a COST of TWOPENCE PER TON.—For particulars and references, apply to the makers, A. and T. FRY, Temple-gate Works, Bristol; or to Mr. JOS. RIDER, Basinghall-street, Leeds.

PATENT SAFETY FUSE.—The GREAT EXHIBITION PRIZE MEDAL was AWARDED to the MANUFACTURERS of the ORIGINAL SAFETY FUSE, BICKFORD, SMITH DAVEY, and PRYOR who beg to inform Merchants, Mine Agents, Railway Contractors, and all persons engaged in Blasting Operations, that, for the purpose of protecting the public in the use of a genuine article, the PATENT SAFETY FUSE *has now a thread wrought into its centre*, which, being patent right, infallibly *distinguishes it from all imitations*, and ensures the continuity of the gunpowder.
This Fuse is protected by a Second Patent, is manufactured by greatly improved machinery, and may be had of any length and size, and adapted to every climate.
Address,—BICKFORD, SMITH, DAVEY, and PRYOR, Tuckingmill, Cornwall.

SAFETY FUSE.—Messrs. WILLIAM BRUNTON AND CO., PENHALLICK, POOL, near CAMBORNE, CORNWALL, and BRYMBO, near WREXHAM, MANUFACTURERS OF FUSE, of every size and length, as exhibited in the Great Exhibition of 1851, and supplied to the Royal Arsenal at Woolwich, the Arctic Expedition, and every part of the globe.
For the convenience of their customers and others in the North, W. BRUNTON and Co. have recently erected a branch manufactory at Brymbo, near Wrexham, where, as at Cornwall, they are at all times PREPARED to EXECUTE UNLIMITED ORDERS for SUPPLYING FUSE upon warrant that it will prove equal to, if not better than, any to be procured elsewhere.

PATENT LEVER BREAK, FOR RAILWAY WAGONS doing away with the objectionable break rack. Can be APPLIED to EXISTING STOCK at a TRIFLING EXPENSE. Royalty moderate. Models can be seen at No. 1, Moorgate, London, E.C.; and the breaks in action at the works of the Railway Carriage Company; at the Peterboro' Station, on the Eastern Counties Railway; the Rugby Station, London and North-Western Railway; the Cardiff Docks Station, Taff Va'e Railway; and at the Works, Oldbury, near Birmingham, where all communications are requested to be sent.

WIRE-ROPE TESTING.

PUBLIC TEST of A. J. HUTCHINGS AND CO.'S PATENT WIRE-ROPE at LIVERPOOL, FEBRUARY 27, 1861.

[From the *Daily Post* of March 1, 1861.]

On Wednesday, the 27th of February, a series of EXPERIMENTS on WIRE-ROPE took place at the Corporation Testing Works, King's Dock. The specimens tested were manufactured by the well-known firm of A. J. HUTCHINGS and Co., of Millwall, London, the Contractors to the Lords of the Admiralty and various foreign Governments, the character of whose rope is so well known in this country, as well as all parts of the Continent. Capt. Ducraft, of H.M.S. *Hastings*, and a number of other gentlemen connected with shipping, were present to witness the experiments, all of which were considered highly satisfactory, and in every respect sustained the reputation of the manufacturers. The following are the results of the experiments:—

An 8 in. rope bore 70 tons WITHOUT BREAKING.
Circumference and breaking strain.

2¼	2½	3	3½	3⅝	4	4½
10¾ tons	14 tons	20 tons	27 tons	29 tons	32¾ tons	45½ tons

N.B.—The 2¼, 3, and 4 in. ropes were the sizes actually tested. The remaining sizes and strains are comparative.

THE ABOVE ROPES ARE FOR COLLIERY USE.

Size. Inches.	Hutchings and Co.'s wire-rope for ships' rigging. Tested Feb. 27, 1861.	Newall and Co.'s Test of Oct. 29, 1860.	Garnock, Bibby, and Co.'s Test, Oct. 29, 1860.
2	5 tons 15 cwts.	—	—
2¼	11 „ 14 „	7 tons 15 cwts.	8 tons 16 cwts.
3⅜	16 „ 10 „	—	—
3½	22 „ 8 „	—	18 „ 5 „
3⅝	23 „ 10 „	16 „ 10 „	—
4	29 „ 10 „	18 „ 15 „	—
4½	37 „ 15 „	—	26 „ 10

N.B.—The 2, 3⅜, and 4 in. ropes were the actual sizes tested. The remaining sizes and strains are comparative.

The above tests certified by Mr. M'Donald the Superintendent of the Corporation Testing Works, Liverpool.

TEST OF WIRE-ROPE AT LIVERPOOL.—The value of Messrs. Hutchings's statement, relative to a test of their manufacture, will be properly estimated when it is known that the ropes were brought down from London specially prepared for the purpose, and not taken promiscuously from their stock, as the samples tested in October were.

The following, extracted from the *Mining Journal* of November 10, 1860, shows the relative strength of the different makers' ropes on that occasion. The samples tested were privately purchased some time previously, and spliced for testing by Newall and Co.'s workmen. The test took place in the presence of representatives from the manufacturers, reporters for the press, and a large number of gentlemen connected with mining and shipping in Liverpool:—

	SIZE OF ROPE TESTED.	
	3½ inch.	2½ inch.
Garnock, Bibby, and Co.'s broke at	18 tons 5 cwts.	8 tons 15 cwts.
R. S. Newall and Co.'s	16 „ 10 „	7 „ 15 „
A. J. Hutchings and Co.'s*	11 „ 10 „	5 „ 0 „

* Messrs. Hutchings's samples were from 1-16 to 3-16 over size.

From this it will be seen that the breaking point of Garnock, Bibby, and Co.'s ropes was on the average 13 per cent. over the guaranteed strain, while those of Hutchings and Co. were 30 per cent. below it.

GARNOCK, BIBBY, AND CO.,
SWAN HEMP AND WIRE-ROPE WORKS, CHAPEL STREET, LIVERPOOL.

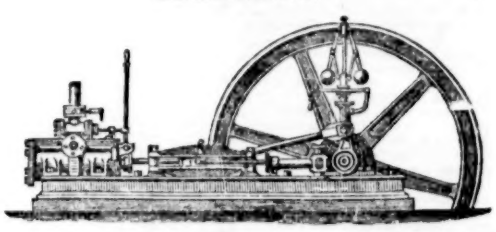
Flat and round wire-ropes of steel and charcoal iron for mines, inclines, &c., of first quality wire, and highest standard of strength.

TO INVENTORS.—All INTENDING PATENTEES should PROCURE the PRINTED INFORMATION regarding PATENTS, their COST, and the MODE of PROCEDURE to be adopted, ISSUED GRATIS by the GENERAL PATENT COMPANY (LIMITED), 71, FLEET STREET, LONDON.
R. MARSDEN LATHAM, Sec.

BEDFORD IRONWORKS, TAVISTOCK.

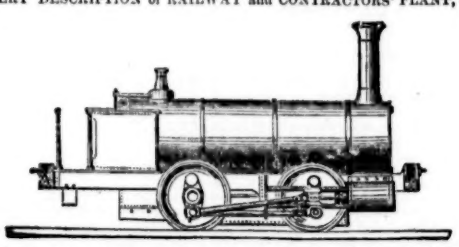
NICHOLLS, WILLIAMS, AND CO. have generally a GOOD STOCK of SECOND-HAND MINING MATERIALS FOR SALE. They also MANUFACTURE STEAM ENGINES of every description on the newest principle. Castings and wrought-iron work made at the shortest notice. Machinery sent to all parts of the world. Steam boilers and chains warranted of the best description.

MESSRS. E. PAGE AND CO.,
VICTORIA WORKS, BEDFORD,
AND LAURENCE POUNTNEY PLACE, CANNON STREET, LONDON
MANUFACTURERS OF



HIGH PRESSURE STEAM ENGINES, from 2½ to 30 horse power, and upwards, adapted for MINING and GENERAL PURPOSES. Prices and full particulars sent on application.

LOCOMOTIVE, STATIONARY, AND PORTABLE STEAM ENGINES.
CONTRACTORS' WAGONS, DOBBIN CARTS, BARROWS, and EVERY DESCRIPTION of RAILWAY and CONTRACTORS' PLANT, &c.

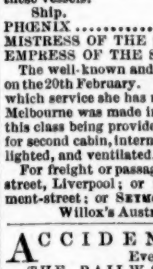


CHEAP LOCOMOTIVES for MINERAL RAILWAYS and OTHER PURPOSES.
HUGHES AND MARCH, ENGINEERS and MANUFACTURERS OF RAILWAY PLANT, and EVERY KIND of MACHINERY,
FALCON WORKS, LOUGHBOROU'GH.

These engines are exceedingly useful in all cases where heavy loads have to be carried up steep inclines. They are fitted in the best style, and with every requisite. Messrs. HUGHES and MARCH, Falcon Works, Loughborough; or E. EDWARDS, Esq., C.E., 13, Beaufort-buildings, Strand, London.

MAKERS of the IMPROVED HORSE ENGINE, by which full power of the horses is given out without friction. It is applicable in all cases where horse power is required.
SECOND HAND PORTABLE STEAM ENGINES.

PATENT PLUMBAGO CRUCIBLES.—The crucibles manufactured by the PATENT PLUMBAGO CRUCIBLE COMPANY have been in successful use for many years by some of the largest ENGINEERS, BRASSFOUNDERS, and REFINERS in this country and abroad. The great SUPERIORITY of these melting pots consists in their capability of melting on the average 35 to 40 pourings of the most difficult metals, and a still greater number of the ordinary character, some of them having actually been worked for the EXTRAORDINARY number of 96 heats. They are unaffected by change of temperature, never crack, and become heated much more rapidly than any other kind, thereby SAVING more than FIFTY PER CENT. in fuel, time, and labour. Lasting as they do for such a length of time, the saving of waste is also very considerable.



The company have recently introduced a CRUCIBLE SPECIALLY ADAPTED for MALLEABLE IRON MELTING, the average working of which has proved to be about seven days.

CRUCIBLES for STEEL MELTING are also made, which save nearly 1½ ton of fuel to every ton of steel fused.

The Patent Plumbago Crucible Company likewise manufacture and import clay crucibles, muffles, portable furnaces, &c., stove backs, all descriptions of fire-standing goods, and every requisite for the assayer and dentist.

For lists, testimonials, &c., apply to the Patent Plumbago Crucible Company, Battersea, Works, London, S.W.

BASTIER'S PATENT CHAIN PUMP,
APPARATUS FOR RAISING WATER ECONOMICALLY, ESPECIALLY APPLICABLE TO ALL KINDS OF MINES, DRAINAGE, WELLS, MARINE, FIRE, &c.

J. U. BASTIER begs to call the attention of proprietors of mines, engineers, architects, farmers, and the public in general, to his new pump, the cheapest and most efficient ever introduced to public notice. The principle of this new pump is simple and effective, and its action is so arranged that accidental breakage is impossible. It occupies less space than any other kind of pump in use, does not interfere with the working of the shafts, and unites lightness with a degree of durability almost imperishable. By means of this hydraulic machine water can be raised economically from wells of any depth; it can be worked either by steam-engine or any other motive power, by quick or slow motion. The following statement presents some of the results obtained by this hydraulic machine, as daily demonstrated by use:—

1.—It utilises from 90 to 92 per cent. of the motive power.
2.—Its price and expense of installation is 75 per cent. less than the usual pumps employed for mining purposes.
3.—It occupies a very small space.
4.—It raises water from any depth with the same facility and economy.
5.—It raises with the water, and without the slightest injury to the apparatus sand mud, wood, stone, and every object of a smaller diameter than its tube.
6.—It is easily removed, and requires no cleaning or attention.

A mining pump can be seen daily at work, at Wheal Concord Mine, South Sydenham, Devon, near Tavistock; and a shipping pump at Woodside Graving Dock Company (Limited), Birkenhead, near Liverpool.

J. U. BASTIER, sole manufacturer, will CONTRACT to ERECT his PATENT PUMP at HIS OWN EXPENSE, and will GUARANTEE IT FOR ONE YEAR, or will GRANT LICENSES to manufacturers, mining proprietors and others, for the USE of his INVENTION.

OFFICES, 19, MANCHESTER BUILDINGS, WESTMINSTER, LONDON.
London, Oct. 10, 1859. Hours from Ten till Four. J. U. BASTIER, C.E.

THE PARAFFIN, OR MINERAL OIL SAFETY GAUGE, made for the Asphaltum Company (Limited), ENABLES CONSUMERS to AVOID PURCHASING PARAFFIN or MINERAL OIL of an EXPLOSIVE or DANGEROUS KIND. Price, with a tin oil holder, 1s. 6d. each; forwarded by post upon receipt of 18 stamps.—Apply at the offices of the company, 34, Great Winchester street, London E.C.

AUSTRALIA AND NEW ZEALAND.
WHITE STAR EX-ROYAL MAIL CLIPPERS,
SAILING FROM
LIVERPOOL to MELBOURNE on the 1st and 20th of every month.
*** Passengers holding Victoria passage warrants will be forwarded to Melbourne by these vessels.

Ship.	Destination.	Register.	Burthen.	To sail.
PHŒNIX	Melbourne	906	2700	Feb. 20.
MISTRESS OF THE SEAS	Melbourne	1677	5000	March 20.
EMPRESS OF THE SEA	Melbourne	1656	5000	April 20.

The well-known and favourite packet ship, *Phœnix*, will be dispatched for Melbourne on the 20th February. This ship has made several successful voyages to Australia, during which service she has made several rapid passages. Her last run from Liverpool to Melbourne was made in 76 days. Her cabins are large and comfortable, passengers in this class being provided with bedding, linen, and all necessaries. The accommodations for second cabin, intermediate, and steerage passengers are excellent, being lofty and well lighted, and ventilated.

For freight or passage apply to the owners, H. T. WILSON and CHAMBERS, 21, Water-street, Liverpool; or to GRINDLAY and Co., 124, Bishopsgate-street, and 55, Parliament-street; or SEYMOUR, PEACOCK, and Co., 116, Fenchurch-street, London.
Willox's Australian and New Zealand hand-books sent for two stamps.

ACCIDENTS ARE UNAVOIDABLE!
Every one should therefore provide against them.
THE RAILWAY PASSENGERS ASSURANCE COMPANY
Grant Policies for Sums from £100 to £1000, Assuring against
ACCIDENTS OF ALL KINDS.
An annual payment of £3 secures £1000 in case of DEATH by ACCIDENT, or a weekly allowance of £6 to the assured while laid up by injury.
Apply for forms of proposal, or any information, to the Provincial Agents, the Booking Clerks at the Railway Stations,
Or to the Head Office, 64, CORNHILL, LONDON, E.C.
£102,817 have been paid by this company as Compensation for 56 fatal Cases, and 5041 Cases of personal injury.
The SOLE COMPANY privileged to issue RAILWAY JOURNEY INSURANCE TICKETS, costing 1d., 2d., or 3d., at all the Principal Stations.
Empowered by Special Act of Parliament, 1849.
64, Cornhill, E.C. WILLIAM J. VIAN, Sec.

COUGHS, ASTHMA, and INCIPIENT CONSUMPTION are EFFECTUALLY CURED by KEATING'S COUGH LOZENGES. Statistics show that 50,000 persons annually fall victims to pulmonary disorders, including consumption, diseases of the chest, and the respiratory organs. Prevention is at all times better than cure; be, therefore, prepared during the wet and wintry season with a supply of Keating's cough lozenges, which possess the virtue of averting as well as of curing a cough or cold. They are good alike for the young or for the aged. Prepared and sold in boxes, 1s. 1½d.; and tins, 2s. 9d., 4s. 6d., and 10s. 6d. each, by THOMAS KEATING, chemist, &c., 79, St. Paul's-churchyard, London. Retail by all druggists, &c.

THE NEW FRENCH REMEDY, THERAPION, for nervousness, debility, and exhaustion. In four weeks restores manhood to the most shattered constitution, with marvellous certainty. Price 11s., or four times the quantity for 33s. Agents for England, THOMAS and Co., 7, Upper St. Martin's-lane, London, by whom it will be sent anywhere, carefully packed, on receipt of Post-office order.

THE MINING SHARE LIST.

DIVIDEND MINES.

Shares.	Mines.	Paid.	Last Pr.	Business.	Dividends Per Share.	Last Paid.
4000	Bedford United (copper), Tavistock†	2 6 8	5¼	5 5¼	12 11 6 0 3 0	Dec. 1861
240	Boscean (tin), St. Just†	20 10 0	60		35 10 0 1 5 0	Dec. 1861
200	Botallack (tin, copper), St. Just	91 5 0	250	245 250	443 5 0 2 10 0	Feb. 1860
1000	Carn Brea (copper, tin), Illogan†	15 0 0	65	75 80	269 10 0 2 0 0	Feb. 1861
200	Cefn Cwm Brwyno (lead), Cardiganshi.	33 0 0	33		9 0 0 4 0 0	April, 1861
2450	Cook's Kitchen (copper), Illogan	17 0 9	30	29 30	1 0 0 0 7 0	Jan. 1862
256	Copper Hill (copper) Redruth	48 0 0	107		4 10 0 2 0 0	Jan. 1862
12000	Copper Miners of England	25 0 0	25		7¼ per cent.	Half-yrly.
350000	Ditto ditto (stock)	100 0 0	24		1 per cent.	Half-yrly.
1055	Craddock Moor (copper), St. Cleer*	8 0 0	26		6 12 0 0 7 0	Jan. 1862
867	Cwm Erfin (lead) Cardiganshire	7 10 0	20		6 18 0 0 15 0	Jan. 1862
128	Cwmystwith (lead), Cardiganshire*	60 0 0	200		235 10 0 4 0 0	Jan. 1862
280	Derwent Mines (sil.-lead), Durham	300 0 0	180		142 0 0 5 0 0	June, 1861
1024	Devon Gt. Con. (cop.), Tavist.* [S.E.]	1 0 0	390	390 400	782 0 0 8 0 0	Jan. 1862
358	Dolcoath (copper, tin), Camborne*	128 17 6	550		648 10 0 8 0 0	Dec. 1861
3000	Dyfngwm (lead), Wales	12 6 6	10		0 5 0 0 2 6	Nov. 1861
512	East Basset (cop.), Redruth [S.E.]*	29 10 0	53	50 52	96 0 0 3 0 0	Jan. 1862
6144	East Caradon (copper), St. Cleer [S.E.]	2 14 6	30½	29½ 30	2 5 0 0 15 0	Jan. 1862
800	East Darren (lead), Cardiganshire*	32 0 0	45		79 10 0 1 0 0	Dec. 1861
1400	Eyam Mining Co. (lead), Derbyshire	5 0 0			20 3 4 0 10 0	May, 1861
2800	Foxdale (id.) [L.] [2560 £25 pd., 240 £20 pd.]†	35				Sept. 1861
5000	Frank Mills (lead), Devon	3 18 6	4½		0 14 0 0 3 0	Sept. 1861
6000	Great South Tolgus [S.E.], Redruth*	0 14 6	4	3⅞ 4¼	7 18 6 0 5 0	Dec. 1861
1798	Great Wheal Fortune, Breage	18 6 0	13½	12¼ 13¼	1 10 0 0 10 0	Jan. 1862
5808	Great Wh. Vor (tin, cp.), Helston [S.E.]	40 0 0	6¼	6 6¼	1 12 6 0 7 6	Sept. 1861
1024	Herodsfoot (id.), near Liskeard [S.E.]	8 10 0	40	39 40	16 5 0 1 15 0	Oct. 1861
1000	Hibernian Mine Company	92 6 2	27½		7 10 0 0 15 0	Sept. 1861
400	Lisburne (lead), Cardiganshire, Wales*	18 15 0	110		379 10 0 2 0 0	Dec. 1861
9000	Marke Valley (copper), Caradon	4 10 6	10¼	10 10¼	1 12 0 0 6 0	Jan. 1862
1800	Minera Mining Co. [L.], (id.), Wrexham	25 0 0	170		78 3 3 3 2 6	Nov. 1861
20000	Mining Co. of Ireland (cop., lead, coal)	7 0 0	16	16¼	14 7 11 0 7 0	Dec. 1861
640	Mount Pleasant (lead), Mold	4 0 0	35		16 10 7 1 5 0	Dec. 1861
6000	New Birch Tor and Vitifer Consols	1 6 6	2¼		0 3 6 0 1 0	Sept. 1861
6000	North Downs (copper) Redruth	2 3 4	5½	5¾ 6	0 7 6 0 5 0	Dec. 1861
1366	North Grambler, Redruth	2 7 6	6		0 10 0 0 10 0	Mar. 1861
5000	Orsedd (lead), Flintshire	0 0 8	1¼		0 9 8 0 0 4	Jan. 1862
6400	Par Consols (cop.), St. Blazey [S.E.]	1 2 6	8½		36 9 6 0 5 0	Nov. 1861
200	Parys Mines (copper), Anglesey [L.]	50 0 0			12 10 0 2 10 0	Sept. 1861
1772	Polberro (tin), St. Agnes		5		6 19 6 0 10 0	Dec. 1861
1120	Providence (tin), Uny Lelant† [S.E.]	10 6 7	46	44 46	61 15 0 1 0 0	Nov. 1861
16	Rhosesmor	50 0 0			1250 0 0 100 0 0	Quarterly.
512	South Caradon (cop.), St. Cleer* [S.E.]	1 5 0	330	320 325	366 0 0 5 0 0	Jan. 1862
512	South Tolgus (cop.), Redruth, Cornwall*	8 0 0	57	53 55	104 10 0 1 0 0	Jan. 1862
496	South Wheal Frances, Illogan* [S.E.]	18 18 9	115	110 115	358 5 0 1 0 0	Jan. 1862
280	Spearne Moor (tin, copper), St. Just	31 17 9	52½		9 15 0 1 0 0	June, 1861
940	St. Ives Consols (tin), St. Ives†	8 0 0	29	26 28	484 10 0 0 10 0	Nov. 1861
9800	Tamar Con. (sil.-id.), Beeralston [S.E.]	4 10 0	2		5 6 0 0 2 6	Jan. 1861
6000	Tincroft (cop., tin), Pool, Illogan [S.E.]	9 0 0	8½	8⅜ 8⅝	10 18 6 0 5 0	Dec. 1861
200	Trumpet Consols (tin), near Helston	57 10 0	100		53 0 0 1 0 0	Aug. 1861
4200	Vigra and Clogau (copper) [L. £5]	2 15 0			1 12 6 0 15 0	Jan. 1862
1024	Wendron Consols (tin), Wendron	11 13 10	11¼	12 13	8 15 0 1 0 0	Jan. 1862
6000	West Basset (copper), Illogan [S.E.]	1 10 0	14	13 14	22 0 0 0 5 0	Sept. 1861
60	West Burton Gill (lead), Yorkshire	50 0 0		110	14 10 0 3 0 0	June, 1861
1024	West Caradon (cop.), Liskeard [S.E.]*	5 0 0	45	43 44	99 11 3 1 0 0	Nov. 1861
6400	West Fowey Consols (tin and copper)	7 10 0	4		0 17 0 0 3 0	Jan. 1862
400	W. Wh. Seton (cop.), Camborne [S.E.]*	47 10 0	295	290 300	330 0 0 8 0 0	Dec. 1861
512	Wheal Basset (copper), Illogan* [S.E.]	5 2 6	97½	100 105	576 10 0 2 0 0	Dec. 1861
256	Wheal Buller (cop.), Redruth* [S.E.]	5 0 0	75		929 0 0 2 0 0	Mar. 1861
2000	Wh. Clifford Amalgamated (cp.), Gwen.	30 0 0	30	30 32	26 0 0 10 0 0	Oct. 1861
2000	Wheal Falmouth and Sperries	2 5 0	8		0 10 0 0 10 0	Feb. 1861
128	Wheal Friendship (copper), Devon	50 0 0	90		2400 10 0 5 0 0	Feb. 1861
512	Wheal Jane (silver-lead), Kea	3 10 0	18		12 10 0 1 0 0	Jan. 1862
4300	Wheal Ludcott (lead), St. Ive	2 10 8	2½	2¼ 2¾	1 12 0 0 4 0	Oct. 1861
896	Wh. Margaret (tin), Uny Lel. [S.E.]†	9 17 6	46	44 46	70 0 0 1 0 0	Nov. 1861
2024	Wh. Mary Ann (id.), Menheniot [S.E.]†	8 0 0	16¼	16 16¼	54 17 6 0 10 0	Dec. 1861
80	Wheal Owles, St. Just, Cornwall	70 0 0	300		285 13 0 5 0 0	Nov. 1861
396	Wheal Seton (tin, copper), Camborne	58 10 0	122	125 127½	133 5 0 1 10 0	Dec. 1861
5000	Wicklow (copper) [L.], Wicklow	5 0 0	54½	55	43 17 6 2 0 0	Oct. 1861

[* Dividends paid every two months. † Dividends paid every three months.]

MINES WITH DIVIDENDS IN ABEYANCE.

700	Aberdovey (silver-lead), Merioneth	1 10 0	30		0 10 0	Mar. 1859
5120	Alfred Consols (cop.), Phillack [S.E.]	3 3 6	⅞		20 3 0 0 2 6	April, 1859
1300	Brightside & Froggatt Grove, Derbysh.	3 0 0	3½		3 0 0 3 0 0	April, 1856
2048	Carnyorth (tin), St. Just	3 15 0	13		0 19 6 0 2 0	Sept. 1860
2000	Central Mines (lead) [L. £5]	0 15 0	5½		0 4 0 0 4 0	Sept. 1859
6000	Charlotte United, Perranuthnoe	2 13 2	¾	¾	0 13 0 0 1 6	Sept. 1859
256	Condurrow (cop., tin), Camborne	20 0 0	62½	60 62½	85 0 0 2 0 0	June, 1857
4076	Devon and Cornwall (copper)	5 11 3	6		0 10 0 0 2 6	Feb. 1859
672	Ding Dong (tin), Gulval	30 2 6	15	14 15	16 7 6 1 10 0	Mar. 1857
2800	Drake Walls (tin, copper), Calstock	2 1 0	1½	1 1½	0 13 6 0 2 0	Sept. 1857
2048	East Falmouth (sil.-id.), Kenwyn, Kea	3 5 0	⅛		0 7 6 0 2 6	Jan. 1858
128	East Pool (tin, copper), Pool, Illogan	24 5 0	240		305 0 0 2 10 0	Aug. 1858
2048	East Wheal Lovell (tin), Wendron	2 13 6			0 5 0 0 5 0	July, 1859
4940	Fowey Consols (copper), Tywardreath	4 0 0	5		41 9 3 0 2 6	June, 1860
486	Grambler and St. Aubyn (cop.) [S.E.]	49 10 0	17	15½ 16½	23 0 0 1 0 0	July, 1860
119	Great Work (tin), Germoe	100 0 0	110		221 10 0 7 10 0	Feb. 1857
200	Herward United (lead), Flintshire	40 0 0	10		3 0 0 1 10 0	July, 1860
6000	Hingston Down Con. (cop.), Cals. [S.E.]	4 19 0	3½	3 3¼	2 16 0 0 2 6	Nov. 1856
5000	Kelly Bray (lead, copper), Callington	4 8 0	21s.	¾	0 6 0 0 2 0	Feb. 1860
20	Laxey Mining Company, Isle of Man	100 0 0	1200		1490 0 0 50 0 0	June, 1857
160	Levant (copper, tin), St. Just	2 10 0	95		1091 0 0 5 0 0	May, 1860
5000	Mendip Hills (lead) [L.], Somerset	3 15 0	1¾		2 1 0 0 2 6	May, 1860
470	Newtownards Mining Co., Co. Down	50 0 0	35		56 0 0 1 0 0	Sept. 1858
6000	North Great Work, Breage	1 3 0	1¼		0 2 0 0 2 0	May, 1860
512	Rosewarne United (cop., tin), Gwinear	19 6 4	18½		33 10 0 1 0 0	Sept. 1860
12000	Sortridge Con. (cop.), Whitchurch [S.E.]	0 16 0	12s.	10s. 11s.	0 10 0 0 2 6	July, 1857
128	South Crinnis (copper), St. Austell	19 0 0	285		60 0 0 20 0 0	June, 1855
20000	St. Day United (tin and cop.), Redruth	2 7 0	¾	¾	0 3 6 0 1 0	Feb. 1858
6000	Tolvadden (copper), Marazion	0 6 0	2		0 13 6 0 3 0	Mar. 1860
572	Trelyon Consols (tin), St. Ives	11 10 0	12½		7 0 0 0 10 0	Sept. 1860
20000	Vale of Towy (lead), Carmarthen [S.E.]	0 13 6	⅛		0 5 2 0 1 0	July, 1858
256	West Damsel (copper), Gwennap	37 0 0	50	48 50	45 0 0 1 0 0	May, 1860
1024	West Providence (tin), St. Erth	16 15 0	3⅜		33 1 9 0 10 0	April, 1857
4096	Wheal Edward (cop.), Calstock [S.E.]	7 7 6	2½	2¼	0 5 0 0 5 0	Mar. 1858
1024	Wheal Grylls (tin), Perranuthnoe	2 4 0	14½	14¼ 14¾	1 12 0 0 7 6	Nov. 1859
1024	Wheal Kitty (tin), Uny Lelant [S.E.]	1 7 2	9	9⅛ 10	8 0 0 0 10 0	Sept. 1860
5000	Wheal Kitty (tin), St. Agnes	4 16 6	1	⅝ 1	0 18 6 0 2 0	July, 1860
1024	Wheal Margery (tin, copper)	15 13 0	8		0 10 0 0 10 0	May, 1860
100	Wheal Mary (tin), Lelant	36 2 6	440		280 5 0 7 0 0	June, 1860
1040	Wh. Trelawny (sil.-id.), Liskeard [S.E.]	5 17 0	16¾	18½ 19¼	43 15 0 1 0 0	Oct. 1860
1022	Wheal Tremayne (tin, cop.), Gwinear	13 2 6	5		10 2 6 0 7 6	Jan. 1854

FOREIGN MINES.

2464	Burra Burra (cop.), South Australia	5 0 0	116		265 0 0 5 0 0	June, 1861
12000	Cobre Copper Co. (cop.), Cuba [S.E.]	40 0 0	36	33 35	98 12 0 1 0 0	Jan. 1862
10000	Copiapo Mining Company, Chili [S.E.]	16 0 0	8		6 8 0 0 5 0	Jan. 1861
18000	East Indian Coal, Calcutta [L.]	10 0 0	10		7½ per cent.	Yearly.
70000	English and Australian [S.E.]	5 0 0	3⅛		1 5 0 0 2 6	Aug. 1861
25000	Gen. Mining Assoc., Nova Scotia [S.E.]	20 0 0	24	23 24	18 5 0 1 0 0	June, 1861
68000	Kapunda Mining Co., Australia [S.E.]	1 0 0	2¼	2 2¼	0 8 0 0 2 0	June, 1861
15000	Linares (id.), Pozo Ancho, Spain [S.E.]	3 0 0	8½		8 6 2 0 0 3	July, 1861
10000	Lusitanian (of Portugal) [S.E.]	2 0 0	1⅞		0 18 9 0 1 6	Aug. 1861
103815	Mariquita and New Granada [S.E.]	1 0 0	⅞		0 9 6 0 1 6	July, 1859
100000	Port Phillip (gold), Clunes [S.E.]	1 0 0	1⅜	1¼ 1⅜	0 5 6 0 1 6	Jan. 1862
11000	St. John del Rey [L.], Brazil [S.E.]	15 0 0	67	64 66	46 5 0 3 0 0	Dec. 1861
20000	West Canada Mining Company [L.]	1 0 0	1¼		0 2 0 0 2 0	June, 1860

FOREIGN MINES WITH DIVIDENDS IN ABEYANCE.

10000	Alten and Quænangen Uni. (cop.) [L. £5]	4 10 0	3		4 5 0 0 15 0	Nov. 1853
10000	Gt. Barrier Land, Min., &c., N. Ze. [L. £5]	4 10 0	3½		15 per cent.	May, 1859
10000	Pontgibaud (sil.-lead), France [S.E.]	20 0 0	4		1 0 0 1 0 0	June, 1855
48174	Unit. Mexican (sil.), Mexico [S.E.] Av.	28 5 0	8½	8¾ 9¼	1 16 6 0 4 0	Feb. 1853

NON-DIVIDEND FOREIGN MINES.

Shares.	Mines.	Paid.	Last Pr.	Bus. done.	Last Call.
20000	Australian (copper), South Australia [S.E.]	7 7 6	1		Sept. 1858
75000	Bon Accord, South Australia (copper) [L. £1] [S.E.]	0 17 6	⅝	½ ¾	Dec. 1860
25000	Capula (silver), Mexico [L. £2]	0 10 0	—		Jan. 1862
6000	Central American (silver) [L.]	5 0 0	12		Feb. 1859
17000	Central Italian (copper) [7000 £2 paid]	0 6 0	—		Jan. 1860
60000	Clarendon Consols (copper), Jamaica [S.E.]	0 17 6	⅜		Jan. 1861
10000	Copiapo Smelting [L.], Chili	10 0 0	8⅛		Fully paid.
75000	Dun Mountain (copper), New Zealand [L.] [S.E.]	1 0 0	1¼	1 1¼	Fully paid.
25000	East del Rey, Brazil [L. £3]	1 0 0	1⅞	1⅛ 1⅞	Sept. 1861
30000	East Kongsberg Native Silver Mining Co. of Norway [L. £5]	1 0 0	¾		April, 1861
15000	Elbe Colliery Company [L. £1]	0 5 0	—	¼ ⅜	Dec. 1861
80000	Ellersalie and Bardowie, Jamaica	0 18 0	1¼		July, 1859
8000	English and Canadian Mining Company [L.]	5 0 0	—		Fully paid.
25000	Fortuna (lead), Spain [L.] [S.E.]	2 0 0	2¼	1¼ 2¼	Fully paid.
80000	Great Northern (copper), South Australia [L. £2] [S.E.]	1 0 0	1¼	1⅛ 1⅜	
24000	Hindostan (copper), Bengal [L. £5]	1 0 0	—		Nov. 1862
4000	Hope Silver-Lead and Copper Mining Co. [L.], Jamaica	25 0 0	—		Fully paid.
80000	Imperial Thessalian (lead, &c.), Thessaly [L. £2]	0 10 0	⅜		June, 1860
10000	Karbitz Colliery Company [L. £1]	0 10 0	—	⅝ ¾	Dec. 1861
100000	Montes Aureos (gold), Brazil [L. £2]	1 0 0	—		Jan. 1862
30000	Lagunazo (sulphur, copper), Portugal [L. £1]	0 15 0	⅛		Dec. 1861
60000	New Granada (gold), South America [S.E.]	1 0 0	⅛		Fully paid.
10000	New Grand Duchy of Baden (silver-lead), near Freiburg	1 0 0	1		Nov. 1858
60000	North Rhine Copper of South Australia [L. £1] [S.E.]	0 15 0	⅝		Nov. 1861
15000	Pachuca Silver Mining Company, Mexico [L. £1]	0 10 0	—		April, 1861
60000	Santa Barbara (gold), Brazil [L. £1]	0 5 0	¾		Nov. 1862
80000	Scottish Australian Mining Company [L. £1]	0 10 0	1⅛		Nov. 1858
15000	South Europe Mining Company, Spain [L. £5]	3 0 0	—		May, 1860
80000	St. John's United (copper, lead), Newfoundland [L.]	1 0 0	⅝		Fully paid.
45000	Victor Emanuel, Italy [L.] [20,000 Pref. Shares, 5s. pd., 25,000 £1 pd.		1⅞		
1000	Western Africa Malachite (copper) [L.]	110 0 0	—		Oct. 1859
12000	Wheal Ellen, South Australia [L. £5]	4 0 0	4¼		July, 1861
35425	Wheal Jamaica (copper)	1 0 0	18s.		Fully paid.
80000	Werthing (copper), South Australia [L.] [S.E.]	1 0 0	⅝		Fully paid.

PROGRESSIVE MINES.

Shares.	Mines.	Paid.	Last Pr.	Bus. done.	Last Call.
4825	Abbey Consols (id.) Cardigan.	2 7 0	1		Nov. 1860
1000	Allt-y-Crib (lead) [L. £5]	2 18 6	2		Oct. 1861
10000	Angarrack (copper), Phillack.	1 1 6	1⅛		June, 1859
1000	Ashburton United (cop., tin)	14 0 0	14¾		Oct. 1861
1624	Balleswidden (tin), St. Just	13 1 10	12		Jan. 1854
10000	Bampfylde (copper), Devon	0 15 0	4		Aug. 1860
4000	Bedford Consols (copper)	2 0 6	3s.		Oct. 1861
2000	Berehaven (copper), Ireland	1 0 0	1¼		
6000	Bickerton (copper) [L.]	1 0 0	3¼		Sept. 1861
7500	Bickleigh Vale Phœnix [L.]	2 0 0	2¼		Fully paid.
200	Billins (lead) [L. £30]	20 0 0	20	15 20	Feb. 1861
10000	Borlase Con. (tin), St. Just [L.]	1 0 0	—		Fully paid.
1248	Boscaswell (tin), Penzance	6 5 0	8		Dec. 1860
2280	Boscundle (tin, cp.), St. Austell	6 15 0	4		Sept. 1860
160	Bosorne & Hollowall, St. Just	6 5 0	10		Dec. 1860
5000	Bottle Hill (tin), Plympton	1 0 0	⅝		
12000	Brea Con. (tin), St. Ives [L.30s.]	1 3 0	24s.	22s.	Oct. 1861
5000	Bronfloyd (id.), Cardigan. [L.]	2 4 0	4¼		Nov. 1861
112	Bron-Haulog (id.), Denbighsh.	20 0 0	20		No call.
5120	Brynambor (id.), Cardiganshi.	1 5 0	2¾		Oct. 1861
200	Brynford Hall (lead), Flint	21 10 0	5		Jan. 1862
500	Bryn Gwiog (lead), Flint	5 0 0	27½		Oct. 1861
2000	Bryntail, Llanidloes, Montgo.	5 7 0	4		Aug. 1861
5850	Budnick Consols (tin), Perran	1 18 0	⅜		Dec. 1861
6380	Buller and Basset Unit. (cop.)	3 9 6	1¾		Jan. 1862
4096	Calstock Consols (copper)	5 10 0	⅛		Dec. 1860
915	Calvadnack, Wendron	18 5 0	7¼		Mar. 1861
1000	Camborne Consols (copper)	16 10 0	8		June, 1861
4600	Camborne Vean & Wh. Francis	8 4 4	1¾		Jan. 1862
914	Caradon Cons. (cop.), St. Cleer	23 7 0	12½	10 11	Dec. 1861
1000	Cardigan Consols [L. £10]	8 0 0	9		Oct. 1861
916	Cargoll (silver-lead), Newlyn	15 5 7	15		Sept. 1860
2580	Carmarthen United	5 0 0	3		Fully paid.
6000	Carn Camborne	0 7 0	14s.	13s. 15s.	May, 1861
4370	Carnewas (id., cop.), Mawgan	1 3 0	¾		June, 1861
3000	Carn Vivian (tin, cop., lead)	2 1 6	2⅛		Nov. 1861
7000	Carrack Dews	2 16 0	1		April, 1861
1056	Carvannall (cop.), Gwennap	21 11 7	3		Dec. 1860
20000	Caryafort (cop., id.) [L. £2½]	0 10 0	8s.	7s. 8s.	Mar. 1859
10000	Castleward, Ireland [L. £1]	0 15 0	15s6d.		Mar. 1861
2500	Cefn Cilcen (lead), Flintshire	1 5 0	1		Sept. 1860
984	Clijah & Wentworth (tin, cp.)	29 5 6	2		May, 1861
6000	Clinton and Edgecombe United	1 0 0	1½		Oct. 1860
3135	Coed Mawr Pool (lead) [L.]	4 7 0	4		June, 1861
2000	Collacombe (cop.), Lamerton	5 5 0	19		Dec. 1857
50000	Connorree (cop., sulph.) [L.]	1 0 0	33s.	31s. 32s.	Fully paid.
5000	Cornubia (tin), Roche	1 5 0	1¼	23s.	Dec. 1861
10000	Craigton (id.) [L. £1], Kirkcud.	0 10 0	¾		June, 1859
876	Crane (copper), Camborne	11 0 0	8		Nov. 1861
30000	Craven Moor (id.), Yorkshire	0 10 0	4s.	3s. 4s.	No call.
12000	Crelake (cop.), Tavistock	—	3		No call.
8000	Crookhaven (cop.) [L. £2½].	1 0 0	6s.	6d.	Mar. 1861
2000	Crowlwm (lead), Llanidloes	1 10 0	⅞		No call.
6000	Crowndale (cop.), Tavistock	0 11 0	3		Nov. 1858
6000	Cuddra (cop., tin), St. Austell	2 9 0	2¾		Nov. 1861
21000	Dale, North Staffordshire [L.]	1 0 0	¾		Fully paid.
4817	Devon and Courtenay (cop.)	1 11 0	11s.		Oct. 1861
5000	Devon Great Wheal Ellen	2 0 0	—		Mar. 1861
12000	Dev. New Copper Co. [L. £2]	—	2		
12000	Devon Union (copper) [L. £1]	0 15 0	¾		Oct. 1861
4566	Devon Wheal Buller (copper)	3 15 0	¾		Dec. 1861
1000	Durlo (tin), Lelant	6 12 0	7½		Mar. 1861
2009	Dolcoath United [L. £5]	1 0 0	2¾		June, 1860
3000	Dulta (tin) [L. £1]	—	1		
244	Eaglebrook (lead.), Cardigan	77 10 0	16		Oct. 1861
600	East Abraham, Crowan	7 10 0	7¾		Oct. 1861
4096	East Alfred Consols (copper)	3 19 11	1⅛	⅞ 1⅛	Dec. 1861
3000	E. Beam (tin), St. Aus. [L. £2]	0 15 0	2½		Nov. 1861
6000	East Budnick and Mount	0 10 0	7s.		Jan. 1861
6000	East Carn Brea (cop.) Redruth	3 11 0	10⅞	10⅜ 10⅞	Oct. 1861
6400	East Crinnis and South Par.	2 11 6	2	⅞	Sept. 1861
6000	East Damsel	1 10 0	1¾		
4000	East Devon Gt. Consols (cop.)	0 16 6	2	2	Dec. 1861
4000	East Fowey (cop.) [L. 50s.]	1 9 0	1½		Dec. 1861
6000	E. Grenville (cop.), Camborne	0 19 6	29s.	24s. 26s.	Oct. 1861
4000	E. Gunnis Lake & S. Bedf. (cp.)	6 10 6	1¾	9s. 11s.	Oct. 1861
12000	East Mona (cop., &c.) [L. £1]	0 5 0	—		May, 1861
8000	E. Polberro, St. Agnes [L.]	0 10 0	½		May, 1861
4096	E. Providence (tin), Uny Lel.	2 5 10	2¼		Jan. 1862
6000	E. Releath (tin, cop.), Wendron	0 1 0	1		Aug. 1860
5000	E. Rosewarne (cp., tin), Gwin.	2 13 0	1¼	1⅛ 1¼	Jan. 1862
5610	East Seton, Camborne	0 2 0	½	¼	Oct. 1861
256	East Tolgus (copper), Redruth	63 0 0	30		Oct. 1861
1000	E. Trefusis (cop.), Gwennap	7 14 7	1		Sept. 1861
1024	E. Treskerby (cop.), Redruth	4 5 0	2		Nov. 1861
1190	E. Wheal Agar (cop.), St. Cleer	8 7 0	2¾		July, 1861
6000	E. Wh. Ellen (sil.-id.), St. Ive	0 1 0	⅜		July, 1860
4000	E. Wh. Russell, Tavis. [S.E.]	7 7 0	2¾	2¼ 2½	Dec. 1861
5700	Exmouth (sil.-id.), Christow.	5 19 0	1¼		Nov. 1861
6000	Fowey and Par Uni., St. Blazey	0 10 0	1⅛		Nov. 1860
5000	Fursdon (cp.), Okeham. [L. 30s.]	1 7 6	2½		Oct. 1861
6000	Furze Hill Wood Cons., Buckl.	0 7 0	1¼		Dec. 1861
114	Garden (tin), Mervah	22 0 0	24		June, 1861
1000	Garreg (lead), Flint	4 13 0	⅛		Jan. 1862
4000	Gawton (copper), Tavistock	1 13 0	⅛		Oct. 1861
1024	Gelliffowller (id.), Holywell	0 2 6	5s.	6d.	June, 1861
6000	Gen. Min. Co. for Irel. (cp.)	4 0 0	5¼	5⅛ 5⅜	June, 1853
4892	Goginan (silv.-id.) [1900 £12½, 2992 £1]	2			July, 1860
6144	Gonamena (copper), St. Cleer	2 15 0	1⅛		Dec. 1861
2000	Goonzion, St. Neot	0 2 6	4s.		Feb. 1861
5000	Great Brigan	3 7 0	2½		June, 1861
4096	Great Caradon (cop.), St. Ive.	1 12 0	⅜		Nov. 1861
6000	Gt. Crinnis (cop.), St. Austell	2 9 0	1¼		Oct. 1861
6000	Great North Downs	1 0 0	1⅛		Dec. 1861
10104	Great Onslow Cons., Camelford	3 10 9	¾		Dec. 1860
6000	Gt. Retallack (sil.-id., blende)	1 9 0	13s.	12s. 14s.	Oct. 1861
47000	Gt. Treguneon. [40,000 £¼, 7000 £¼ pd.]	—			
10000	Great Treveddoe (copper)	0 14 0	11s.		Aug. 1861
6000	Gt. Tywarnhaile (cp.), [L. £5]	3 0 0	3		Jan. 1861
5120	Great Wheal Alfred [S.E.]	14 1 2	6s.		July, 1861
3730	Great Wheal Baddern (tin)	5 13 0	¾		Oct. 1861
6000	Gt. Wh. Busy (cop., tin), Ken.	13 0 0	6¾	6¼ 6½	Mar. 1861
12500	Great Wh. Martha (cop.) [L.]	1 0 0	1¼		Fully paid.
10240	Gunnis Lake (Clitters' Adit)	0 2 0	3¼		Mar. 1861
5000	Gurlyn (cop., tin), St. Erth	1 14 3	⅜		Oct. 1861
8634	Gwydyr Park Con., Llanrwst	0 18 6	9s.		Dec. 1861
10000	Hafod (id.), Cardigan [L. £ 5]	1 0 0	—		Jan. 1862
6400	Harwood (id.), Durham [L. £1]	0 3 6	⅜		July, 1861
7219	Hawkmoor (tin, cop.) Calstock	2 19 6	⅛		Oct. 1861
10000	Holmbush [5000 £5 2s. pd., 5000 £5s. pd.]	—	⅛		Sept. 1860
6000	Huckworthy Bridge (copper)	0 19 6	⅛		Oct. 1861
40	Imper